UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC., Petitioner,

v.

TELEFONAKTIEBOLAGET LM ERICSSON, Patent Owner

U.S. PATENT NO. 8,995,357

DECLARATION OF FRIEDHELM RODERMUND IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 8,995,357

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I, Friedhelm Rodermund, do hereby declare as follows:

I. INTRODUCTION AND ENGAGEMENT

1. I have been retained in this matter by Apple Inc. ("Petitioner" or "Apple") to provide testimony regarding 3GPP's standard business practices for record keeping and publishing technical specifications, change request proposals, reports, and other documents developed during the course of standards activities carried out by the 3rd Generation Partnership Project ("3GPP") and the European Telecommunications Standards Institute ("ETSI").

2. I have been asked to provide my opinions regarding the authenticity and dates of public accessibility of the following 3GPP documents:

- T-doc R1-01-0079, which represents a document with the title "Variable TTI proposal for HSDPA" (hereinafter "R1-01-0079") (Ex. 1013)
- T-doc R1-01-0312, which represents a document with the title "Downlink Model for HSDPA" (hereinafter "R1-01-0312") (Ex. 1011)
- T-doc R2-071762, which represents a document with the title "Scheduling of D-BCH" (hereinafter "R2-071762") (Ex. 1007)

- T-doc R2-072183, which represents a proposed Liaison Statement from RAN WG2 to RAN WG1 on the provisioning of system information in LTE (hereinafter "R2-072183") (Ex. 1005)
- T-doc R2-071911, which represents a document with the title "System information structure (with TP)" (hereinafter "R2-071911") (Ex. 1012)
- T-doc R2-071337, which represents a document with the title "System information scheduling and change notification" (hereinafter "R2-071337") (Ex. 1018)
- Version 7.1.0 of technical specification 3GPP TS 25.301 ("Technical Specification Group Radio Access Network; Radio Interface Protocol Architecture (Release 7)") (hereinafter "TS 25.301 v7.1.0") (Ex. 1009)
- Version 7.8.0 of technical specification 3GPP TS 44.018 ("Technical Specification Group GSM/EDGE Radio Access Network; Mobile radio interface layer 3 specification; Radio Resource Control (RRC) protocol (Release 7)") (hereinafter "TS 44.018 v7.8.0") (Ex. 1010)

3. As an ETSI Project Manager and Secretary, from June 1998 to December 2004, I have personal knowledge of 3GPP's standard business and records keeping practices. I continued following 3GPP's work ever since. Thus, based on my experience, personal knowledge, and review of 3GPP's business

records, I am able to testify regarding the authenticity of certain documents published by 3GPP and the timing of their publication.

4. I am also knowledgeable about document management practices and the usage of email reflectors in TSG RAN WG1 and TSG RAN WG2. This is due to the fact that all 3GPP working groups used the same document repository on <u>ftp.3gpp.org</u> and all working groups use the same email exploder tool. Thus, I'm able to testify regarding the availability and authenticity of any 3GPP documents.

5. I am being compensated for my time spent on this matter at my usual rate of \notin 450 per hour. My fee is not contingent on the outcome of this or any matter, or on the content of any of the testimony I give in this declaration. I have no financial interest in Petitioner.

6. I have been informed that Telefonaktiebolaget LM Ericsson (hereinafter referred to as "Patent Owner") alleges ownership and is the current assignee of U.S. Patent No. 8,995,357 ("the '357 Patent") (Ex. 1001). I have no financial interest in the Patent Owner or the '357 patent.

II. <u>BACKGROUND AND QUALIFICATIONS</u>

7. I have more than 20 years of experience working with standards development organizations including the Third Generation Partnership Project ("3GPP"), the European Telecommunications Standards Institute ("ETSI"), and the Open Mobile Alliance ("OMA"). I have particular experience with the development

of standards related to cellular telecommunications, including the standards for the Universal Mobile Telecommunications System ("UMTS"), Long Term Evolution ("LTE"), and 5G, which are all standards developed by the 3GPP.

8. I attended the University of Technology Aachen in Aachen, Germany, where I performed graduate studies in Electrical Engineering with a focus on telecommunications technologies ("Dipl.-Ing. TH" degree). I also attended the University of Technology Trondheim in Trondheim, Norway, and completed my Diploma thesis, "Design of a dual processor computer for digital signal processing in power electronics," in 1993.

9. From December 1993 to June 1998, I worked at Mannesmann Mobilfunk as a System Engineer and Project Manager in Quality Assurance and Technical Standards. One of my responsibilities was to ensure by managing and performing related test activities that cellular network equipment was compatible with the Global System for Mobile Communications ("GSM") standard developed by ETSI. During that time, I also started working as a standards delegate. I attended my first ETSI meeting in 1996 (although I was already following ETSI developments from 1992 during my studies).

10. From June 1998 to December 2004, I worked at ETSI as a project manager for various ETSI Special Mobile Group ("SMG") and 3GPP working groups. First, I served as a secretary of SMG4 "Data Services" and SMG8 "Base

Stations Testing." Then, as a project manager with the ETSI Mobile Competence Center ("MCC"), I supported establishing 3GPP as the new international standards development organization for cellular telecommunications. One of my roles was acting as Secretary for 3GPP's Technical Specifications Group Terminals, Working Group ("T2"), the group which played a leading role in the creation of standards for Multimedia such as the Multimedia Messaging Service ("MMS").

11. Later, I was a secretary of the highest-level Technical Specifications Group Terminals which was besides other things responsible for the development of test specifications including tests for the radio interface.

12. I edited all technical specifications produced by my working groups and presented results to the parent body for approval. I attended all meetings (apart from some sub-working group meetings) and was also responsible for compiling meeting reports, for handling all the meeting documents, and managing the work plan. It was also my role to guide the groups and to advise the chairmen regarding 3GPP working methods and procedures including document handling, and to make sure delegates were aware of their company's obligations under the 3GPP Intellectual Property Rights policy.

13. As part of my responsibilities at ETSI, I acted as a 3GPP custodian of records by personally managing 3GPP's public File Transfer Protocol (ftp) folders, which I used to make publicly accessible various 3GPP documents, including

versions of 3GPP specifications, technical reports, liaison statements, change requests, contributions, agendas, meeting reports, and other 3GPP documents from my working groups. I am also knowledgeable about document management practices used in other working groups and within 3GPP in general with regard to making documents publicly accessible through the same, public ftp server of 3GPP.

14. Since I left ETSI as a staff member in 2005, I have been continuously involved in standardization activities, including with Open Mobile Alliance, ETSI, and 3GPP. Since 2017, I also have been attending the ETSI IPR Special Committee, which is responsible for the maintenance of the ETSI IPR Policy.

15. After I left ETSI, I worked from January 2005 to October 2014 at Vodafone, first as a Project Manager for Mobile Broadcast Standards, and then as Vice Chairman of the Device Management working group of the Open Mobile Alliance, and then as a Senior Standards Strategist, all with responsibilities as described on my C.V. At Vodafone, I was deeply involved in standards work with ETSI and 3GPP and other standards setting organizations, including as a delegate to 3GPP SA1 "Services." As part of my responsibilities, I attended selected 3GPP meetings, submitted documents to 3GPP, used 3GPP resources (including 3GPP's ftp server) extensively, and remained knowledgeable about 3GPP policies and procedures with regard to document management and public accessibility. I was also

involved in the creation of patents, defense activities related to patent litigations, and patent evaluation, mostly in the context of standards development.

16. Since leaving Vodafone in 2014, I have performed consulting work regarding Internet of Things (IoT) and Machine to Machine (M2M) technology and standards, first at Friedhelm Rodermund Consulting and then as the Founder and Director of IOTECC GmbH. In connection with my work, I regularly deal with standards such as OMA's Lightweight M2M, 3GPP's LTE, Narrowband IoT (NB-IoT) and 5G standards. And I have extensively used 3GPP resources and have remained knowledgeable about 3GPP policies and procedures with regard to document management and public accessibility.

17. I also provide consulting services related to patents, in particular around 3GPP Standard Essential Patents ("SEPs"), and I have been working as an expert witness on a number of occasions. I continue to closely follow the maintenance of the ETSI IPR Policy as a delegate to the ETSI IPR Special Committee. Furthermore, I am conducting a seminar on SEPs and the Internet of Things at the Technical University of Ilmenau, Germany.

18. At the time of writing this declaration, I am following – including attending selected meetings - the following standards committees: ETSI oneM2M, ETSI IPR Special Committee, Open Mobile Alliance, and 3GPP.

19. A copy of my curriculum vitae, which includes a detailed description of my experience and education, is attached as Appendix A. A list of litigation matters on which I have worked over the last five years is also included in my curriculum vitae.

III. <u>SUMMARY OF MY OPINIONS</u>

20. It is my opinion that R1-01-0079 (Ex. 1013) is an authentic 3GPP Tdoc and would have been publicly accessible through ftp.3gpp.org no later than January 22, 2001.

21. It is my opinion that R1-01-0312 (Ex. 1011) is an authentic 3GPP Tdoc and would have been publicly accessible through ftp.3gpp.org no later than March 4, 2001.

22. It is my opinion that R2-071762 (Ex. 1007) is an authentic 3GPP Tdoc and would have been publicly accessible through ftp.3gpp.org no later than May 4, 2007.

23. It is my opinion that R2-072183 (Ex. 1005) is an authentic 3GPP Tdoc and would have been publicly accessible through ftp.3gpp.org no later than May 15, 2007.

24. It is my opinion that R2-071911 (Ex. 1012) is an authentic 3GPP T-doc and would have been publicly accessible through ftp.3gpp.org no later than May 4, 2007.

25. It is my opinion that R2-071337 (Ex. 1018) is an authentic 3GPP T-doc and would have been publicly accessible through ftp.3gpp.org no later than March 22, 2007.

26. It is my opinion that TS 25.301 v7.1.0 (Ex. 1009) is a technical specification published by 3GPP and would have been publicly accessible through ftp.3gpp.org as of April 6, 2007.

27. It is my opinion that TS 44.018 v7.8.0 (Ex. 1010) is a technical specification published by 3GPP and would have been publicly accessible through ftp.3gpp.org as of March 2, 2007.

IV. <u>PUBLICATION OF 3GPP SPECIFICATIONS AND RELATED</u> <u>DOCUMENTS</u>

A. <u>General Practices</u>

28. Unless otherwise noted, the following is an accurate description of 3GPP general practices from 1998 to the present, regardless of whether I use the present or past tense to describe those practices.

29. 3GPP was established in 1998 by a group of telecommunications standard development organizations from Japan, Korea, China, Europe, and the United States to jointly develop worldwide standards for mobile telecommunications. Today, 3GPP consists of seven partners: Association of Radio Industries and Businesses, Japan ("ARIB"), Alliance for Telecommunications

Industry Solutions, USA ("ATIS"), China Communications Standards Association ("CCSA"), European Telecommunications Standards Institute ("ETSI"), Development Telecommunications Standards Society, India ("TSDSI"), Telecommunications Technology Association, Korea ("TTA"), and Telecommunication Technology Committee, Japan ("TTC"). In addition to being one of the founding partners, ETSI hosts the Mobile Competence Centre ("MCC"), which provides administrative and technical support for the day-to-day work of 3GPP. Furthermore, ETSI manages 3GPP's IT services such as the 3GPP website, ftp server, and email exploders.

30. 3GPP is the world's leading organization for developing and maintaining cellular telecommunications standards, which it has done since its foundation in 1998. As noted above and in my C.V., I began working for 3GPP, as part of my work at ETSI, the European-based organizational partner of 3GPP.

31. In the ordinary course of its regularly conducted business activities, and pursuant to its standard business practices, 3GPP publishes technical specifications, proposals, reports, and other documents related to the development of cellular telecommunications standards. Such documents are published for the purposes of discussion and establishment of industry standards for cellular telecommunications. This has been 3GPP's ordinary course of business since when I began working at ETSI in 1998.

32. In the ordinary course of 3GPP's regularly conducted business activities, and pursuant to its standard business practices, all draft technical specifications, proposals, reports, and other temporary documents to be discussed or considered in relation to 3GPP's telecommunications standards activities were, and continue to be, assigned a temporary document number and made publicly available, including on the ftp server associated with the 3GPP website, currently residing at ftp.3gpp.org. Such documents are referred to as "T-docs." Final versions of the technical specifications also were, and continue to be, publicly available from that same ftp server.

33. The names and the structure of 3GPP working groups, as of April 2007 can be found at

https://web.archive.org/web/20071230120440/http://www.3gpp.org/TB/home.htm (reproduced below):



34. Each Technical Specification Group (TSG) or Working Group adopts a structured numbering system for the documents associated with their meetings, and those systems typically follow a consistent numbering system as shown in the following example: xminnzzzz. The numbering system normally comprises five logical elements: (1) x: a single letter corresponding to the TSG; wherein in 2007/2008 x was one of R (Radio Access Network), C (Core and Terminals), S (Service and System Aspects), or G (GSM/EDGE Radio Access Network); (2) m: a single character corresponding to the Working Group identity (typically 1, 2, 3, etc.) or, in the case of the TSG itself, the letter "P"; (3) i: normally the hyphen character

"-"; (4) nn: the calendar year of the meeting to which the document was submitted; and (5) zzzz: a running number.

35. In the ordinary course of 3GPP's regularly conducted business activities, and pursuant to its standard business practices, from December 1998 onwards, 3GPP published all of its T-docs and all final versions of its technical specifications on its ftp server, which has always been easily and publicly accessible from its website and currently resides at ftp.3gpp.org.

36. As early as December 1998, 3GPP's ftp server was freely accessible to the general public with no login, password, or membership requirement.

37. By 1999, at least 100 companies were members of 3GPP (719 companies by December 2020), ranging from Bosch to Ericsson to Nokia to Samsung and generally including those interested in the discussion, creation, and adoption of cellular telecommunications standards, including UMTS. Each of these companies typically delegated multiple individuals to regularly participate in 3GPP meetings. Further, pursuant to 3GPP's standard business practices, 3GPP working groups sent emails notifying these individuals as soon as new or additional documents had been uploaded to 3GPP's ftp server. Thus, not only did the general public have access to the documents on the ftp server, but some of the most interested members of the public—those working to develop standards for cellular telecommunication or working to implement the standards—were personally

informed of their availability by email. Based on my experience with 3GPP and the telecommunications industry, I would expect any person implementing a cellular network or device, e.g., an LTE network or device, to consult the corresponding specifications on the 3GPP ftp server, as well as other related documents. The whole purpose of 3GPP creating and making these specifications available was so that engineers and other individuals would have ready access to them when developing and implementing cellular networks and devices.

38. By June 1999, 3GPP's ftp server was well-known to persons in the cellular telecommunications industry as a source of public information regarding industry standards and technological advances.

3GPP specifications bear a specification number consisting of four or 39. five digits, e.g., 09.02 or 29.002. The first two digits define the specification series which are defined to group the different aspects of the 3GPP system into, e.g. requirements, service aspects, radio aspects codecs, security aspects, and test specifications. The series digits are followed by two additional digits for the 01 to 13 series or three further digits for the 21 to 55 series. The subjects of the individual specification series are explained on **3GPP's** website at https://www.3gpp.org/specifications/specification-numbering, and reproduced below:

Subject of specification series	3G and beyond / GSM (R99 and later)	GSM only (Rel- 4 and later)	GSM only (before Rel-4)
General information (long defunct)			00 series
Requirements	21 series	41 series	01 series
Service aspects ("stage 1")	22 series	42 series	02 series
Technical realization ("stage 2")	23 series	43 series	03 series
Signalling protocols ("stage 3") - user equipment to network	24 series	44 series	04 series
Radio aspects	25 series	45 series	05 series
CODECs	26 series	46 series	06 series
Data	27 series	47 series (none exists)	07 series
Signalling protocols ("stage 3") -(RSS-CN) and OAM&P and Charging (overflow from 32 range)	28 series	48 series	08 series
Signalling protocols ("stage 3") - intra-fixed-network	29 series	49 series	09 series
Programme management	30 series	50 series	10 series
Subscriber Identity Module (SIM / USIM), IC Cards. Test specs.	31 series	51 series	11 series
OAM&P and Charging	32 series	52 series	12 series
Access requirements and test specifications		13 series (1)	13 series (1)
Security aspects	33 series	(2)	(2)
UE and (U)SIM test specifications	34 series	(2)	11 series
Security algorithms (3)	35 series	55 series	(4)
LTE (Evolved UTRA), LTE-Advanced, LTE-Advanced Pro radio technology	36 series	-	-
Multiple radio access technology aspects	37 series	-	-
Radio technology beyond LTE	38 series	-	-

40. For example, the LTE radio standard is covered in the "36 series" and is further subdivided into separate sections or specifications. The LTE radio specification starts at TS 36.101 and ends at TR 36.978. Excluding withdrawn specifications, the LTE standard consists of more than 250 specifications. Each specification can span from a few pages to hundreds of pages. One full version of the LTE standard is massive, spanning tens of thousands of pages.

41. In the ordinary course of 3GPP's regularly conducted business activities, and pursuant to its standard business practices, T-docs are usually uploaded to 3GPP's ftp server and website before the meeting where they are to be discussed. Documents created or revised during the course of a meeting are normally uploaded at the latest during the week following the meeting (e.g., the meeting report of the meeting is usually published for review during the week following the meeting).

42. In the ordinary course of 3GPP's regularly conducted business activities, and pursuant to its standard business practices, 3GPP maintains archives that include different versions of the specifications, as well as email communications to its membership, including emails announcing the uploading of new or additional documents to 3GPP's ftp server. These archives are created at the time the emails are initially sent.

43. At least as early as July 1999, all of 3GPP's email archives, including the dedicated email list for TSG RAN WG1 and TSG RAN WG2 were freely accessible to the general public with no login, password, or membership requirement. The screenshot below represents the subscription page of the 3GPP

RAN WG2 email list from July 2002 as maintained by the Internet Archive¹ demonstrating that this webpage was publicly available and that only email address and name had to be entered to join the email list. Alternatively, everyone interested could obtain a LISTSERV password for managing subscriptions interactively without email confirmations. I can confirm that this webpage looked similar at the time the cited documents were published (2001 and 2007) and that subscription was already possible for every interested individual since the early days of 3GPP in 1999.

¹ See

https://web.archive.org/web/20020728212703/http://list.etsi.org:80/scripts/wa.exe? SUBED1=3gpp_tsg_ran_wg2&A=1

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Subscription Settings Join or Leave the 3GPP_TSG_RAN_WG2 List Buscripter's Corner sonror Archives This screen allows you to join or leave the 3GPP_TSG_RAN_WG2 list. To confirm your identify and prevent third paties from subscripting you to a list against you you go go all the operation. Heig leg off Atematively, you can login with your LISTSERV password (if you have one) and update your subscription interactively, without e-mail confirmation. Your F-Mail Address:	INTERNET ARCHIVE http://list.etsi.org	g/scripts/wa.exe?SUBED1=3gpp_tsg_ran_wg	2&A=1	Go JUN JUL JAN	About this capture
Subscriber's Corner Server Archives This screen allows you to join or leave the 3GPP_TSG_RAN_WG2 list. To confirm your identity and prevent third parties from subscribing you to a list against you will, an e-mail message with a confirmation code will be sent to the address you specify in the form. Simply walt for this message to arrive, then follow the instructions to confirm the operation. Heing Log off Attematively, you can login with your LISTSERV password (if you have one) and update your subscription interactively, without e-mail confirmation. Your E-Mail Address:	Subscription Settings		Join or Leave the 3GPP_TSG_RAN_	WG2 List	
Heine Log off Atternatively, you can login with your LISTSERV password (if you have one) and update your subscription interactively, without e-mail confirmation. Your E-Mail Address: Your Name:	Subscriber's Corner Server Archives	This screen allows you to join or leave the will, an e-mail message with a confirmation instructions to confirm the operation.	3GPP_TSG_RAN_WG2 list. To confirm your identity and pr n code will be sent to the address you specify in the form. Si	event third parties from subscribing you to a mply wait for this message to arrive, then fol	list against your llow the
Your E-Mail Address:	<u>Help</u> Log off	Alternatively, you can login with your LIST	SERV password (if you have one) and update your subscript	tion interactively, without e-mail confirmation	ı.
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44. Each of 3GPP's member companies typically assigned one or more individuals to regularly participate in these email lists. Thus, not only did the general public have access to the emails in 3GPP's email archives, but some of the most interested members of the public–those working to develop standards for cellular telecommunication–personally received copies of such emails through their participation in the email lists.

45. By June 1999, 3GPP's email archives were well-known to persons in the cellular telecommunications industry as a source of public information and of

technical specifications, proposals, meeting announcements, technical discussions and reports regarding industry standards and technological advances.

46. Based on my experience with 3GPP and the telecommunications industry, I would expect a person interested in the development of cellular standards, e.g., UMTS, to consult the emails archives of the working groups and TSGs that person is interested in, and/or, to be subscribed to the corresponding email reflectors to receive any email notifications in real-time.

47. 3GPP specifications almost always are duplicated in at least two and sometime more locations on the ftp server. One location corresponds to a "snapshot" of the specifications corresponding to a particular plenary meeting cycle-for instance, the 2018-12 snapshot contains a snapshot of numerous specifications after the December 2018 3GPP plenary meetings. The second location is an "archive" that contains all versions over time for a given specification. While 3GPP aims to upload the updated specifications to both locations at the same time, occasionally there may be a small difference in the upload date, and thus the date stamp, for the same specification uploaded to the two locations. Additionally, specifications which are not yet approved (so called "draft" specifications) are presented as T-docs at working group and at plenary meetings (as soon as the working group decides to submit the specification to the plenary meeting for information or approval). In many cases, the T-docs are also distributed on the email exploder of the working group prior to the

meeting, making the T-docs available to all those subscribed to the email distribution list.

48. The timestamp on 3GPP's ftp server shows the date when the document was uploaded the last time. Thus, the timestamp shows the latest possible date the document became publicly available and accessible on 3GPP's ftp server. The given document might have been available earlier and the original timestamp might have been overwritten because the document was uploaded again. According to my experience, this is something which happened quite frequently. Thus, the ftp timestamp is reliable as the latest possible upload date but one cannot determine whether it represents the first upload of a document to the ftp server.

49. 3GPP's working practice to store their documents on its ftp server, as described above, has not changed over time. Starting from the first 3GPP meetings in 1998 until present, all WGs and plenary meetings are represented by dedicated meeting folders on the ftp server. These meeting folders include the documents discussed at the meetings. Both the folders and the documents are accessible to the public. Almost every week, a new meeting folder with the respective documents is added. In addition to the plenary and WG meeting folders, and some other folders, there is also the "Specs" folder, which holds all 3GPP specifications including the aforementioned "snapshot" and archive folders. Since the early days of 3GPP a new folder is added inside the "Specs" folder after each TSG plenary meeting to hold the

latest versions of specifications approved at those TSG plenary meetings. This is still 3GPP's working practice today; thus, this practice has not changed over time.

B. <u>Specific Documents</u>

1. <u>R1-01-0079</u>

50. Based on my personal knowledge and my review of 3GPP's business records, I recognize Ex. 1013 as a true and correct copy of T-doc R1-01-0079, which represents a document with the title "Variable TTI proposal for HSDPA." The document was authored by Lucent Technologies and discusses benefits and simulation results of a variable length transmission time interval (TTI) for the HS-DSCH. On its face, R1-01-0079 refers to the RAN WG1 meeting #18 held on January 15-19, 2001, in Boston, USA. The number of the meeting and the year was omitted from the document's face; however, I was able to identify the correct meeting and year by retrieving the document from the corresponding RAN WG1 meeting #18 folder. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that R1-01-0079 was available either prior to or during that meeting to at least all attending 3GPP members. The public availability of the document is confirmed by the date stamp, January 22, 2001, shown on the historic 3GPP ftp server for the corresponding downloadable file ("R1-01-0079.pdf"), as maintained by the Internet Archive at

https://web.archive.org/web/20010523025623/http://www.3gpp.org/ftp/tsg_ran/W G1_RL1/TSGR1_18/Docs/PDFs. This information is also shown on the date stamp for the present-day listing of the same document on the 3GPP ftp server at https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_18/Docs/PDFs, as shown in the screenshot below:

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Filename 1-01-0071.pd			^ Size Modified
R1-01-0072.pd	f		18.6 KB 22.01.01, 12:57
R1-01-0073.pd	f		42.0 KB 22.01.01, 12:57
R1-01-0074.pd	f		68.8 KB 22.01.01, 12:57
R1-01-0075.pd	f		38.0 KB 13.01.01, 12:23
R1-01-0076.pd	f		31.4 KB 12.01.01, 17:15
R1-01-0077.pd	f		68.7 KB 12.01.01, 17:15
R1-01-0078.pd	f		58.1 KB 22.01.01, 12:57
🔹 R1-01-0079.pd	f		30.5 KB 22.01.01, 12:57
🚨 R1-01-0080.pd	f		73.8 KB 22.01.01, 12:57
R1-01-0081.pd	f		772.1 22.01.01, 12:57
R1-01-0082.pd	f		42.4 KB 22.01.01, 12:57
R1-01-0083.pd	f		25.0 KB 22.01.01, 12:58
R1-01-0084.pd	f		22.5 KB 13.01.01, 12:23
R1-01-0085.pd	f		37.8 KB 12.01.01, 19:06
🙆 R1-01-0086.pd	f		191.9 22.01.01, 12:58
🚨 R1-01-0087.pd	f		64.2 KB 22.01.01, 12:58
B R1-01-0088.pd	f		25.7 KB 22.01.01. 12:58
164 Files			

51. In addition, metadata information for the downloaded and extracted Tdoc file states a last Modified date of "22. Jan. 2001", as shown in the screenshot below:



52. The official meeting report of the RAN WG1 meeting #18 held on January 15-19, 2001, can be found as T-doc R1-01-0188 in Appendix B. According

to the 3GPP website at https://portal.3gpp.org/Meetings.aspx#/ which is shown by the screenshot below, that meeting was attended by 110 individuals (out of 117 registered participants):

	🔒 portal.3	3gpp.org C	
	RAN1-#18 - Meet	ting information	ଡ଼ୣୣୣୣୣ
	Meeting identifier : Meeting Contacts : Meeting Reference : Meeting Type : Location : Start Date : End Date : Check-In starts at :	20936 3GPPRAN1-#18 Ordinary Boston , US 15 Jan 2001 00:00 (GMT+01:00) Brussels, Co Madrid, Paris 19 Jan 2001 00:00 (GMT+01:00) Brussels, Co Madrid, Paris 10:06 (GMT+01:00) Brussels, Copenhagen, M	benhagen, benhagen, adrid, Paris
	More options	i.	^
Meeting's contributions (Tdocs) Agenda Report Invitation		<u>List of 19 Tdocs</u> Contribution not available <u>Download TDoc list (Excel)</u>	
	List of participants: 117 registe	red, 110 attended	~

53. In the meeting report, T-doc R1-01-0079 is referred to on page 16. There the document is mentioned several times which clearly shows the document was available at the RAN WG1 meeting #18. The meeting report mentions on page 16 that the document raised a lot of questions as can be seen by the screenshot below:

There were quite a lot of questions and comments were made with respect to R1-01-0079, 81 and 82.

54. Furthermore, the document was distributed via the 3GPP_TSG_RAN_WG1 email exploder on January 14, 2001, as shown in Appendix C. At that time this email exploder had around 1000 subscribers as can be seen by the Internet Archive at https://web.archive.org/web/20010330204214/http://list.3gpp.org/.

55. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that this document was available to all subscribers of the 3GPP_TSG_RAN_WG1 email exploder by January 14, 2001, and to the general public by January 22, 2001, at the latest.

2. <u>R1-01-0312</u>

56. Based on my personal knowledge and my review of 3GPP's business records, I recognize Ex. 1011 as a true and correct copy of T-doc R1-01-0312, which represents a document with the title "Downlink Model for HSDPA." The document was authored by Lucent Technologies and it provides clarifications to comments and questions on Lucent's Downlink model proposal for HSDPA. On its face, R1-01-0312 refers to the RAN WG1 meeting #19 held on February 26 – March 2, 2001, in Las Vegas, USA. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that R1-01-0312 was available either prior to or during that meeting to at least all attending

3GPP members. The public availability of the document is confirmed by the date stamp, March 4, 2001, shown on the historic 3GPP ftp server for the corresponding downloadable file ("R1-01-0312.pdf"), as maintained by the Internet Archive at https://web.archive.org/web/20010519154508/http://www.3gpp.org/ftp/tsg_ran/W G1_RL1/TSGR1_19/Docs/PDFs/. This information is also shown on the date stamp for the present-day listing of the same document on the 3GPP ftp server at https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_19/Docs/PDFs, as shown in the screenshot below:

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ftp.3g	pp.org	v 🔹 🔊 🥖 🗌	
Open Connection	Quick Connect	Action Refresh Edit	Disconnect
	/tsg_ran/WG1_R	L1/TSGR1_19/Docs/PDFs	0 🔺 Q
Filename			 Size Modified
- ктотозоо.ра			13.3 KB 04.03.01, 17.01
R1-01-0306.pdf			14.4 KB 04.03.01, 17:01
R1-01-0307.pdf			10.4 KB 04.03.01, 17:01
R1-01-0308.pdf			1.0 MB 04.03.01, 17:01
R1-01-0309.pdf			31.9 KB 04.03.01, 17:01
R1-01-0310.pdf			28.6 KB 04.03.01, 17:01
R1-01-0311.pdf			53.2 KB 04.03.01, 17:01
R1-01-0312.pdf			23.4 KB 04.03.01, 17:01
R1-01-0313.pdf			19.3 KB 04.03.01, 17:01
R1-01-0314.pdf			14.4 KB 04.03.01, 17:01
R1-01-0315.pdf			8.3 KB 04.03.01, 17:01
R1-01-0316.pdf			14.6 KB 04.03.01, 17:01
R1-01-0317.pdf			13.4 KB 04.03.01, 17:01
R1-01-0318.pdf			12.9 KB 04.03.01, 17:01
R1-01-0319.pdf			14.6 KB 04.03.01, 17:01
B1-01-0320.pdf			14.1 KB 04.03.01.17:01
R1-01-0321.pdf			12.5 KB 04.03.01, 17:01
5 Files			ſ

57. In addition, metadata information for the downloaded and extracted Tdoc file states a Last Modified date of "4. March 2001", as shown in the screenshot below:



58. The official meeting report of the RAN WG1 meeting #19 held on February 26 – March 2, 2001, can be found as T-doc R1-01-0435 in Appendix D.

According to the 3GPP website at <u>https://portal.3gpp.org/Meetings.aspx#/</u> which is shown by the screenshot below, that meeting was attended by 110 individuals (out of 116 registered participants):

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								RA	AN1-#	19 - Mee	ting information				ତ	
								M Me C	Meeting Meeting R Meet Meet S E Check-In	identifier : Contacts : eference : ing Type : Location : tart Date : End Date : starts at :	21086 3GPPRAN1-#19 Ordinary Las Vegas , US 27 Feb 2001 00:00 (G 02 Mar 2001 00:00 (G 14:43 (GMT+01:00) B	SMT+01:00) Brussels, (SMT+01:00) Brussels, (Irussels, Copenhagen,	Copenhagen, Madri Copenhagen, Madri Madrid, Paris	d, Paris d, Paris	5 5	
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		<u>Meeting</u> <u>Agenda</u> <u>Report</u> <u>Invitatio</u>	<u>g's contr</u> un	ibutions (Tdoc	<u>ss)</u>						List of 25 Tdocs Contribution not availa Download TDoc list (F	able <u>Excel)</u>				
L							List	of partio	cipants:	116 register	ed, 110 attended					•
										Clo	se					

59. In the meeting report, T-doc R1-01-0312 is referred to on page 22. There the document is mentioned as "Noted" which clearly shows the document was available at the RAN WG1 meeting #19. Furthermore, a discussion of the document can be found on page 28 (item *30). The screenshot below shows the excerpt of page 22:

60. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that this document was available to all participants of the RAN WG1 meeting #19 by March 2, 2001, and to the general public by March 4, 2001, at the latest.

3. <u>R2-071762</u>

Based on my personal knowledge and my review of 3GPP's business 61. records, I recognize Ex. 1007 as a true and correct copy of T-doc R2-071762, which represents a document with the title "Scheduling of D-BCH." The document was authored by Qualcomm Europe and it discusses how to implement the agreement that system information is divided into scheduling units, with SU-I carrying scheduling information for the other SUs. On its face, R2-071762 refers to the RAN WG2 meeting #58 held on 7-11 May 2007 in Kobe, Japan. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that R2-071762 was available either prior to or during that meeting to at least all attending 3GPP members. The public availability of the document is confirmed by the date stamp, May 4, 2007, shown on the historic 3GPP ftp server for the corresponding downloadable file ("R2-071762.zip"), as maintained by the Internet Archive at

https://web.archive.org/web/20070716092822/http://www.3gpp.org/ftp/tsg_ran/W G2_RL2/TSGR2_58/Documents. This information is also shown on the date stamp for the present-day listing of the same document on the 3GPP ftp server at https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_58/Documents, as shown in the screenshot below:

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Open Connection	Quick Connect	Action Refresh Edit	Disconnect
	/tsg_ran/WG2_F	RL2/TSGR2_58/Documents	0 🔺 Q
Filename 2-071752.zi			Size 8 Modified 7, 13:25
R2-071754.zi	р		237.5 04.05.07, 13:25
R2-071755.zi	р		37.2 KB 04.05.07, 13:25
R2-071756.zi	р		16.3 KB 04.05.07, 13:25
R2-071757.zi	р		93.4 KB 04.05.07, 13:25
R2-071759.zi	р		19.4 KB 04.05.07, 13:25
R2-071760.zi	р		29.4 KB 04.05.07, 13:25
R2-071761.zi	р		55.0 KB 04.05.07, 13:25
📕 🖪 R2-071762.zi	р		46.9 KB 04.05.07, 13:25
R2-071763.zi	р		28.4 KB 04.05.07, 13:25
R2-071764.zi	р		21.1 KB 04.05.07, 13:25
R2-071765.zi	р		36.4 KB 04.05.07, 13:25
R2-071766.zi	р		77.3 KB 04.05.07, 13:25
R2-071767.zi	р		499.1 04.05.07, 13:25
R2-071768.zi	р		22.7 KB 04.05.07, 13:25
R2-071769.zi	р		16.0 KB 04.05.07, 13:25
R2-071770.zi	р		82.1 KB 04.05.07, 13:25
R2-071771.zi	р		12.3 KB 04.05.07, 13:25
11 Files			<u> </u>

62. In addition, metadata information for the downloaded and extracted Tdoc file states a last Modified date of "1. May 2007", as shown in the screenshot below:



63. The official meeting report of the RAN WG2 meeting #58 held on 7-11 May 2007 can be found as T-doc R2-072901 in Appendix E. According to the 3GPP website at <u>https://portal.3gpp.org/Meetings.aspx#/</u> which is shown by the screenshot below, that meeting was attended by 163 individuals (out of 191 registered participants):

•		0	🖨 portal.3	gpp.org	Q		Â	0 +
			RAN2#58 - Meet	ing information			Ø	×
			Meeting identifier : Meeting Contacts : Meeting Reference : Meeting Type : Location : Start Date : End Date : Check-In starts at :	26014 3GPPRAN2#58 Ordinary Kobe , JP 07 May 2007 09:00 (G 11 May 2007 17:00 (G 00:00 (GMT+02.00) Br	:MT+02.00) Brussels, Co MT+02.00) Brussels, Co russels, Copenhagen, Ma	penhagen, Madrid, Paris penhagen, Madrid, Paris adrid, Paris		
								^
	Meeting's contributions (Tdocs) View Meeting Contributions Settin Agenda Report	<u>195</u>		Invitation List of 2130 Tdocs Contribution not availa Download TDoc list (E	ible <u>xcel)</u>			
		Lis	t of participants: 191 registere	ed, 163 attended				~
			Clo	se				

64. The meeting report mentions on page 15 that the document R2-071762 was "presented" and "noted" which clearly shows the document was available at the

RAN WG2 meeting #58, as can be seen by the screenshot below:

R2-071762 Scheduling of D-BCH The document was presented by Nathan (...) from Qualcomm. Discussion: is there really an issue for low cycle broadcast? It remains predictive Decision: noted
65. Furthermore, the document was distributed via the 3GPP_TSG_RAN_WG2 email exploder on May 1, 2007, as shown in Appendix F. At that time this email exploder had 892 subscribers as can be seen by the Internet Archive at https://web.archive.org/web/20070624072559/http://list.3gpp.org.

66. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that this document was available to all subscribers of the 3GPP_TSG_RAN_WG2 email exploder by May 1, 2007, and to the general public by May 4, 2007, at the latest.

4. <u>R2-072183</u>

67. Based on my personal knowledge and my review of 3GPP's business records, I recognize Ex. 1005 as a true and correct copy of T-doc R2-072183, which represents a proposed Liaison Statement from RAN WG2 to RAN WG1 on the provisioning of system information in LTE. On its face, R2-072183 refers to the RAN WG2 meeting #58 held on 7-11 May 2007 in Kobe, Japan. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that R2-072183 was available either prior to or during that meeting to at least all attending 3GPP members. The public availability of the document is confirmed by the date stamp, May 15, 2007, shown on the historic 3GPP ftp server for the corresponding downloadable file ("R2-

37

072183.zip"), as maintained by the Internet Archive at

https://web.archive.org/web/20070716092822/http://www.3gpp.org/ftp/tsg_ran/W G2_RL2/TSGR2_58/Documents. This information is also shown on the date stamp for the present-day listing of the same document on the 3GPP ftp server at https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_58/Documents, as shown in the screenshot below:

• • •		ftp.3gpp.org – FTP	Unregistered
🛃 ft	p.3gpp.org	* 🖌 🏈 🥖	
Open Connection	Quick Connect	Action Refresh Edit	Disconnect
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Filename			^ Size Modified
R2-072177.zi	p		31.9 KB 15.05.07, 17:42
R2-072178.zi	р		121.1 15.05.07, 13:29
R2-072179.zi	р		10.2 KB 15.05.07, 13:29
R2-072180.zij	р		32.1 KB 15.05.07, 13:29
R2-072181.zi	р		35.7 KB 15.05.07, 13:29
R2-072182.zi	р		55.2 KB 15.05.07, 17:42
🕒 R2-072183.zi	p .		12.1 KB 15.05.07, 17:42
R2-072184.zi	р		147.0 15.05.07, 17:42
R2-072186.zi	р		12.3 KB 15.05.07, 13:03
R2-072187.zi	р		154.8 15.05.07, 13:29
R2-072188.zi	р		15.7 KB 15.05.07, 13:03
R2-072189.zi	р		10.1 KB 15.05.07, 13:03
R2-072190.zi	р		9.0 KB 15.05.07, 13:29
R2-072191.zi	р		8.7 KB 15.05.07, 13:03
R2-072192.zi	р		13.6 KB 15.05.07, 13:29
R2-072193.zi	р		154.5 15.05.07, 13:04
D2_07210/ -i	n		12 0 KB 15 05 07 13:04
698 Files			

68. In addition, metadata information for the downloaded and extracted Tdoc file states a last Modified date of "9. May 2007", as shown in the screenshot below:



69. The official meeting report of the RAN WG2 meeting #58 held on 7-

11 May 2007 can be found as T-doc R2-072901 in Appendix E. According to the

3GPP website at <u>https://portal.3gpp.org/Meetings.aspx#/</u> which is shown by the screenshot below, that meeting was attended by 163 individuals (out of 191 registered participants):

•	•		0	🔒 portal.3	gpp.org	Ċ		Δ O
								×
È				RAN2#58 - Meet	ing information			Ø
				Meeting identifier : Meeting Contacts : Meeting Reference : Location : Start Date : Check-In starts at :	26014 3GPPRAN2#58 Ordinary Kobe , JP 07 May 2007 09:00 (GM 11 May 2007 17:00 (GM 00:00 (GMT+02.00) Bru	IT+02.00) Brussels, Copeni IT+02.00) Brussels, Copeni ssels, Copenhagen, Madrid	hagen, Madrid, Paris hagen, Madrid, Paris I, Paris	
				More options				^
		Meeting's contributions (Tdocs View Meeting Contributions Se Agenda Report	;) ettings		Invitation List of 2130 Tdocs Contribution not availabl Download TDoc list (Exc	le <u>cel)</u>		
			List	of participants: 191 registere	d, 163 attended			~
				Clo	se			

70. In the meeting report, T-doc R2-072183 is referred to on page 94. There it states that "The LS was revised after presentation in R2-072186".

R2-072183 LS on System Information Broadcast The LS was revised after presentation in R2-072186.

71. This clearly shows that T-doc R2-072183 was treated during the RAN WG2 meeting #58, thus, available during that meeting. Furthermore, the last Modified date of May 9, 2007, as shown above is during the week the meeting was held (7-11 May 2007). As shown above, the date stamp on the public 3GPP ftp server

shows May 15, 2007. As I explained in paragraph [46] this reflects the latest date a document was uploaded. Furthermore, the meeting report clearly shows the document was available to the 163 delegates during the meeting at the latest by May 11, 2007.

72. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that this document was available to all delegates at the RAN WG2 meeting #58 by May 11, 2007, and to the general public by May 15, 2007, at the latest.

5. <u>R2-071911</u>

73. Based on my personal knowledge and my review of 3GPP's business records, I recognize Ex. 1012 as a true and correct copy of T-doc R2-071911, which represents a document with the title "System information structure (with TP)". The document was authored by Samsung and categorised the most time critical system information, considering the main mobility scenarios. On its face, R2-071911 refers to the RAN WG2 meeting #58 held on 7-11 May 2007 in Kobe, Japan. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that R2-071911 was available either prior to or during that meeting to at least all attending 3GPP members. The public availability of the document is confirmed by the date stamp,

May 4, 2007, shown on the historic 3GPP ftp server for the corresponding downloadable file ("R2-071911.zip"), as maintained by the Internet Archive at https://web.archive.org/web/20070716092822/http://www.3gpp.org/ftp/tsg_ran/W G2_RL2/TSGR2_58/Documents. This information is also shown on the date stamp for the present-day listing of the same document on the 3GPP ftp server at https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_58/Documents, as shown in the screenshot below:

• • •		ftp.3gpp.org – FTP	Unregistered
R R R	ftp.3gpp.org	* 🗸 🅥 🥖	
Open Connection	Quick Connect	Action Refresh Edit	Disconnect
	/tsg_ran/WG2_RL	2/TSGR2_58/Documents	` \ Q
Filename	zip		^ Size Modified
R2-071904.z	zip		29.3 KB 04.05.07, 13:25
R2-071905.z	zip		51.5 KB 04.05.07, 13:25
R2-071906.z	zip		49.5 KB 04.05.07, 13:25
R2-071908.z	zip		18.3 KB 04.05.07, 13:25
R2-071909.z	zip		41.3 KB 04.05.07, 13:25
R2-071910.z	zip		18.1 KB 04.05.07, 13:25
📄 R2-071911.z	zip		48.5 KB 04.05.07, 13:25
R2-071912.z	zip		28.8 KB 04.05.07, 13:25
R2-071913.z	zip		109.4 04.05.07, 13:25
R2-071914.z	zip		52.0 KB 04.05.07, 13:25
R2-071915.z	zip		64.7 KB 04.05.07, 13:25
R2-071916.z	zip		41.2 KB 04.05.07, 13:25
R2-071917.z	zip		116.2 04.05.07, 13:26
R2-071918.z	zip		111.2 04.05.07, 13:26
R2-071919.z	zip		106.2 04.05.07, 13:26
R2-071920.z	zip		112.6 04.05.07, 13:26
698 Files	•		

74. In addition, metadata information for the downloaded and extracted Tdoc file states a Last Modified date of "3. May 2007", as shown in the screenshot below:



75. The official meeting report of the RAN WG2 meeting #58 held on 7-11 May 2007 can be found as T-doc R2-072901 in Appendix E. According to the 3GPP website at https://portal.3gpp.org/Meetings.aspx#/ which is shown by the

screenshot below, that meeting was attended by 163 individuals (out of 191 registered participants):

•	•				🔒 portal.3ç	gpp.org	Ċ	
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ľ					RAN2#58 - Meeti	ng information		<i>©</i> \
					Meeting identifier : Meeting Contacts : Meeting Reference : Location : Start Date : End Date : Check-In starts at :	26014 3GPPRAN2#58 Ordinary Kobe , JP 07 May 2007 09:00 (GMT+0 11 May 2007 17:00 (GMT+0 00:00 (GMT+02.00) Brussel	12.00) Brussels, Copenhagen, Madrid, Pari 12.00) Brussels, Copenhagen, Madrid, Pari s, Copenhagen, Madrid, Paris	is s
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		<u>Meeting's contrib</u> <u>View Meeting Co</u> <u>Agenda</u> <u>Report</u>	<u>utions (Tdocs)</u> ntributions Settings			Invitation List of 2130 Tdocs Contribution not available Download TDoc list (Excel)		
				Li	st of participants: 191 registere	d, 163 attended		~
l					Clos	50		

76. In the meeting report, T-doc R2-071911 is referred to on page 15. There it states that "The document was presented by Himke (...) from Samsung" which clearly shows the document was available at the RAN WG2 meeting #58, as can be seen by the screenshot below:

R2-071911 System information structure (with TP) The document was presented by Himke (...) from Samsung.

77. Furthermore, the document was distributed via the 3GPP_TSG_RAN_WG2 email exploder on May 3, 2007, as shown in Appendix G.

At that time this email exploder had 892 subscribers as can be seen by the Internet Archive at <u>https://web.archive.org/web/20070624072559/http://list.3gpp.org</u>.

78. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that this document was available to all subscribers of the 3GPP_TSG_RAN_WG2 email exploder by May 3, 2007, and to the general public by May 4, 2007, at the latest.

6. <u>R2-071337</u>

79. Based on my personal knowledge and my review of 3GPP's business records, I recognize Ex. 1018 as a true and correct copy of T-doc R2-071337, which represents a document with the title "System information scheduling and change notification." The document was authored by Samsung and it discusses details of the system information scheduling and analyses different options for indicating system information changes. On its face, R2-071337 refers to the RAN WG2 meeting #57bis held on 26-30 March 2007 in St. Julian's, Malta. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that R2-071337 was available either prior to or during that meeting to at least all attending 3GPP members. The public availability of the document is confirmed by the date stamp, March 22, 2007, shown on the historic 3GPP ftp server for the corresponding downloadable file

("R2-071337.zip"), as maintained by the Internet Archive at

https://web.archive.org/web/20070716092330/http://www.3gpp.org/ftp/tsg_ran/W G2_RL2/TSGR2_57bis/Documents. This information is also shown on the date stamp for the present-day listing of the same document on the 3GPP ftp server at https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_57bis/Documents, as shown in the screenshot below:

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ftp.3gpp.org	* * <	
Open Connection Quick Co	onnect Action Refresh Edit	Disconnect
💭 🔺 🕨 🛅 /tsg_r	an/WG2_RL2/TSGR2_57bis/Documents	
Filename 2-071331.zip		Sizes KB Modified 7, 17:49
R2-071332.zip		12.6 KB 22.03.07, 17:49
R2-071333.zip		16.8 KB 22.03.07, 17:49
R2-071334.zip		171.6 22.03.07, 17:49
R2-071335.zip		95.2 KB 22.03.07, 17:49
R2-071336.zip		32.1 KB 22.03.07, 17:49
R2-071337.zip		29.0 KB 22.03.07, 17:49
R2-071338.zip		27.0 KB 22.03.07, 17:49
R2-071339.zip		72.6 KB 22.03.07, 17:49
R2-071340.zip		18.4 KB 22.03.07, 17:49
R2-071341.zip		153.6 22.03.07, 17:49
R2-071342.zip		31.6 KB 22.03.07, 17:49
R2-071343.zip		82.7 KB 22.03.07, 17:49
🖹 R2-071344.zip		16.7 KB 22.03.07, 17:49
R2-071345.zip		68.5 KB 22.03.07, 17:49
450 Files		<u> </u>

80. In addition, metadata information for the downloaded and extracted Tdoc file states a last Modified date of "20. March 2007", as shown in the screenshot below:



81. The official meeting report of the RAN WG2 meeting #57bis held on 26-30 March 2007 can be found as T-doc R2-072131 in Appendix H. According to the 3GPP website at https://portal.3gpp.org/Meetings.aspx#/ which is shown by the screenshot below, that meeting was attended by 134 individuals (out of 144 registered participants):



82. The meeting report mentions R2-071337 on page 17 and page 81 which clearly shows the document was registered for the RAN WG2 meeting #57bis. The screenshot below shows the excerpt from page 17:

R2-071337 System information scheduling and change notification

83. Furthermore, the document was distributed via the 3GPP_TSG_RAN_WG2 email exploder on March 21, 2007, as shown in Appendix I. At that time this email exploder had around 900 subscribers as can be seen by the

Internet

Archive

https://web.archive.org/web/20070223072732/http://list.3gpp.org:80/.

84. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that this document was available to all subscribers of the 3GPP_TSG_RAN_WG2 email exploder by March 21, 2007, and to the general public by March 22, 2007, at the latest.

7. <u>TS 25.301 v7.1.0</u>

85. Based on my personal knowledge and my review of 3GPP's business records, I recognize Ex. 1009 as a true and correct copy of version 7.1.0 of technical specification 3GPP TS 25.301 ("Technical Specification Group Radio Access Network; Radio Interface Protocol Architecture (Release 7)"), which shows on its cover page "2007-03," indicating the year (2007) and month (March) during which this document was released by 3GPP. The document was published and freely available on 3GPP's ftp server by April 6, 2007. The public availability of the document is confirmed by the date stamp shown on the historic 3GPP ftp server for the corresponding downloadable file ("25.301-710.zip"), as maintained by the Internet Archive, available at

https://web.archive.org/web/20070430162821/http://www.3gpp.org/ftp/Specs/archive/25 series/25.301. This information is also shown on the date stamp for the

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present-day listing of the same document on the 3GPP ftp server, available at https://www.3gpp.org/ftp/Specs/archive/25_series/25.301, and as shown by the screenshot below:

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ftp.3gpp.org	a 🔽 🏶 🖌 🏈	1	
Open Connection Quick	Connect Action Refres	h Edit	Disconnect
🛱 🔸 🖿 /Sp	ecs/archive/25_series/25.301	ᅌ 🔺 Q	
Filename ⁵³⁰¹⁻⁶¹⁰ .zip		^ Size	Modified
25301-620.ZIP		623.2	22.03.05, 09.22
25301-630.zip		633.1	28.06.05, 09:05
🖹 25301-640.zip		628.3	12.10.05, 17:51
25301-650.zip		618.4	24.10.07, 09:27
25301-660.zip		619.5	20.03.08, 15:42
25301-700.zip		627.7	05.04.06, 13:16
25301-710.zip		616.8	06.04.07, 14:04
25301-720.zip		625.7	16.07.07, 19:42
25301-730.zip		614.0	24.10.07, 09:27
25301-740.zip		625.5	20.03.08, 15:42
25301-750.zip		724.1	15.06.10, 12:00
[®] 25301-800.zip		660.5	04.01.08, 09:39
[®] 25301-810.zip		689.0	20.03.08, 15:42
[®] 25301-820.zip		753.3	17.06.08, 07:18
[®] 25301-830.zip		754.9	16.09.08, 07:42
[®] 25301-840.zip		768.7	05.01.09, 08:52
[®] 25301-850.zip		771.3	16.03.09, 07:56
256 Files			

86. In addition, metadata information for the downloaded specification file states a last Modified date of "6. April 2007", as shown in the screenshot below:



87. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that this document was available to all 3GPP members and the general public by April 6, 2007, at the latest.

88. I believe that a person without prior knowledge of the technical specification (TS) number would have been able to easily find the TS for download via internet search. For instance, a Google search for "3gpp radio interface protocol architecture" provides the TS number "25.301" as the top result as can be seen in the screenshot below:



89. Following the provided search result link "Specification # 25.301 – 3GPP" leads to a 3GPP web page offering under the tab "Versions" download links to all versions of TS 25.301 including version 7.1.0, as shown by the screenshot below:

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) irtal						
General Ver	sions	Responsibility	Related	Specifi	cation	#: 2	5.30
RAN#39	<u> </u>	2008-03-20		66	ETSI TDo	CR	
<u>RAN#38</u>	<u>8.0.0</u>	2008-01-04		66	ETSITDo	CR	
Release 7(Spec is	UCC for this	Release)	Latest Remark:				
Meetings	Version	Upload date	Comment				
RAN#48	7.5.0	2010-06-16		60	ETSI TDo	CR	
RAN#39	7.4.0	2008-03-20		66	ETSI TDo	CR	
RAN#37	7.3.0	2007-10-24		66	ETSI TDo	CR	
RAN#36	<u>7.2.0</u>	2007-07-17		60	ETSI TDo	CR	
RAN#35	<u>7.1.0</u>	2007-04-06		66	ETSI TDo	CR	
RAN#31	<u>7.0.0</u>	2006-04-06		60	ETSI TDo	CR	
Release 6(Spec is	UCC for this	Release)	Latest Remark: (2015-01-2 update	22) create	ed for M.14	457	
Meetings	Version	Upload date	Comment				
RAN#39	<u>6.6.0</u>	2008-03-20		66	ETSI TDo	CR	
RAN#37	<u>6.5.0</u>	2007-10-24		66	ETSI TDo	CR	
RAN#29	<u>6.4.0</u>	2005-10-14		66	ETSI TDo	CR	
DANI#20	620	2005 06 20		12	ETSI TD	CR	

90. A further alternative route of finding TS 25.301 v7.1.0 is going through the 3GPP web site. Searching for "3GPP" leads to the 3GPP website http://www.3gpp.org, as can be seen by the screenshot below:



91. Entering "radio interface protocol architecture" into the search box of the 3GPP web site provides "Specification # 25.301" as the top result, as can be seen by the screenshot below:



leads to the same 3GPP web page as mentioned in paragraph 89 offering under the tab "Versions" download links to all versions of TS 25.301 including version 7.1.0, as shown by the screenshot below:

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	Ortal							
General Ve	ersions	Responsibility	Related	Spe	cific	cation #	‡: 25. 3	601
RAN#39	8.1.0	2008-03-20			66	ETSI TDoc	CR	
RAN#38	8.0.0	2008-01-04			66	ETSI TDoc	CR	
Release 7(Spec is	SUCC for this	s Release)	Latest Rema	ırk:			Ę	3
Meetings	Version	Upload date	e Co	omment				
RAN#48	7.5.0	2010-06-16			60	ETSI TDoc	CR	
RAN#39	<u>7.4.0</u>	2008-03-20			66	ETSI TDoc	CR	
RAN#37	7.3.0	2007-10-24			60	ETSI TDoc	CR	
RAN#36	<u>7.2.0</u>	2007-07-17			60	ETSI TDoc	CR	
RAN#35	<u>7.1.0</u>	2007-04-06			66	ETSI TDoc	CR	
RAN#31	<u>7.0.0</u>	2006-04-06			66	ETSI TDoc	CR	
Release 6(Spec is	SUCC for this	s Release)	Latest Rema update	ırk: (2015-01-22) cr	eateo	l for M.145	57	3
Meetings	Version	Upload date	e Co	omment				
RAN#39	<u>6.6.0</u>	2008-03-20			60	ETSI TDoc	CR	
RAN#37	<u>6.5.0</u>	2007-10-24			60	ETSI TDoc	CR	
RAN#29	<u>6.4.0</u>	2005-10-14			60	ETSI TDoc	CR	
DAN#20	620	2005 06 20			22	FTSI TDer	CR	

93. The above example searches illustrate that it is very easy for an interested member of the public without prior knowledge of the TS number to locate any version of TS 25.301, including version 7.1.0, for download.

94. The above searches were performed at the time of writing this report. According to my personal experience, similar searches done in April 2007 or around that timeframe would have similarly provided the path to download version 7.1.0 of TS 25.301.

8. <u>TS 44.018 v7.8.0</u>

95. Based on my personal knowledge and my review of 3GPP's business records, I recognize Ex. 1010 as a true and correct copy of version 7.8.0 of technical specification 3GPP TS 44.018 ("Technical Specification Group GSM/EDGE Radio Access Network; Mobile radio interface layer 3 specification; Radio Resource Control (RRC) protocol (Release 7)"), which shows on its cover page "2007-03" as the year (2007) and month (March) during which this document was released by 3GPP. The document was published and freely available on 3GPP's ftp server by March 2, 2007. This is confirmed by the date stamp shown on the historic 3GPP ftp server for the corresponding downloadable file ("44018-780.zip"), as maintained by the Internet Archive at

https://web.archive.org/web/20070516095440/http://www.3gpp.org/ftp/Specs/archive/44_series/44.018. This information is also shown on date stamp for the presentday listing of the same document on the 3GPP ftp server at

https://www.3gpp.org/ftp/Specs/archive/44_series/44.018, as shown by the screenshot below:

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ftp.3gpp.org	🖸 🔹 🖌 🥖	
Open Connection Quick Connect	ct Action Refresh Edit	Disconnect
□ ► ► /Specs/ar	chive/44_series/44.018)
Filename		^ Size Modified
44018-730.zip		621.2 27.01.06, 11:47
44018-731.zip		570.7 03.02.06, 15:17
44018-740.zip		608.1 12.05.06, 10:31
44018-750.zip		580.9 13.07.06, 12:44
44018-760.zip		569.3 28.09.06, 08:26
44018-770.zip		569.2 11.12.06, 14:25
44018-780.zip		608.2 02.03.07, 16:39
44018-790.zip		574.2 31.05.07, 07:39
44018-6n0.zip		569.7 17.12.07, 13:13
44018-6o0.zip		546.4 12.03.09, 15:47
44018-820.zip		581.9 03.03.08, 15:45
44018-830.zip		641.1 27.05.08, 12:57
44018-840.zip		589.6 12.09.08, 14:04
44018-850.zip		624.1 15.12.08, 09:51
44018-860.zip		611.9 12.03.09, 15:47
44018-870.zip		688.1 12.06.09, 07:32
27 Files		

96. In addition, metadata information for the downloaded and extracted specification file states a last Modified date of "2. March 2007", as shown in the screenshot below:



97. Thus, based on my personal knowledge and experience with ETSI's and 3GPP's standard business practices, this information tells me that this document

was available to all 3GPP members and the general public by March 2, 2007, at the latest.

98. I believe that a person without prior knowledge of 3GPP and/or the technical specification (TS) number would have been able to easily find the TS for download via internet search. For instance, a Google search for "GSM radio resource control protocol" provides the TS number "44.018" as one of the top results as can be seen in the screenshot below:

<	0	् 🔒 GSM radio resource	control protocol	5 ¢
Google	GSM radio resource control protoc	ol	x Q	
https://de.wikipedia.o Radio Resource Das Radio Resource eingesetztes Protoke https://en.wikipedia Radio Resou The Radio Resou interface. It is a lay	rg > wiki > Radio_Resource_Control ▼ ce Control - Wikipedia e Control Protocol (RRC) ist ein im M oll für die Steuerung der funktechnisch a.org > wiki > R ▼ Diese Seite überse arce Control - Wikipedia rce Control (RRC) protocol is used ir ver 3 (Network Layer) protocol used b	obilfunk auf der Luftschnittstelle en tzen n UMTS, LTE and 5G on the Air etween UE and		
Ähnliche Frag	gen			
What is RRC proto	ocol?		~	
What is the goal of	f RRC?		~	
What are the two r	nodes of RRC?		~	
ls RRC a Layer 3?		F	eedback geben	
https://www.3gpp.org Specification # Title: Mobile radio into protocol. Status: Uno Du hast diese Seite a	→ DynaReport • 44.018 - 3GPP erface layer 3 specification; GSM /EDG der change control. am 15.11.21 besucht.	E Radio Resource Control (RR	ac)	

99. Following the provided search result link "Specification # 44.018 – 3GPP" leads to a 3GPP web page offering under the tab "Versions" download links to all versions of TS 44.018 including version 7.8.0, as shown by the screenshot below:

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3		Portal								
Ge	eneral	Versions	Responsibility	Related	S	pecific	atior	ו #: 44.0 1	8	
	GENAN#4	<u>4 1.13.0</u>	2003-12-10		<u> </u>	90	-	-		
	<u>GERAN#4</u>	<u>3 7.18.0</u>	2009-09-29			66	ETSI TO	OOC CR		
	GERAN#4	<u>2</u> <u>7.17.0</u>	2009-06-12			66	ETSI TO	loc CR		
	GERAN#4	<u>1 7.16.0</u>	2009-03-16			66	ETSI TI	OCC CR		
	<u>GERAN#4</u>	<u>0 7.15.0</u>	2008-12-15			66	ETSI TO	loc CR		
	GERAN#3	<u>9</u> <u>7.14.0</u>	2008-09-22			66	ETSI TO	OOC CR		
	<u>GERAN#3</u>	<u>8 7.13.0</u>	2008-06-13			66	ETSI TO	Ooc CR		
	GERAN#3	7 7.12.0	2008-03-20			66	ETSI TO	CR		
	GERAN#3	<u>6 7.11.0</u>	2007-12-17			66	ETSI TO	CR CR		
	<u>GERAN#3</u>	<u>5 7.10.0</u>	2007-09-25			66	ETSI TO	OOC CR		
	<u>GERAN#3</u>	<u>4 7.9.0</u>	2007-06-13			66	ETSI TO	Ooc CR		
	GERAN#3	<u>3 <u>7.8.0</u></u>	2007-03-20			66	ETSI	CR		
	GERAN#3	2 7.7.0	2006-12-11			66		CR CR		
	GERAN#3	<u>1 7.6.0</u>	2006-10-02			66	ETSI TO	OCC		
	GERAN#3	<u>0 7.5.0</u>	2006-07-17			66		Ooc CR		
	GERAN#2	<u>9 7.4.0</u>	2006-05-12			66	ETSI	CR		
	GERAN#2	<u>8 7.3.1</u>	2006-02-03			66		Doc CR		
	GERAN#2	<u>8 7.3.0</u>	2006-02-03			66	ETSI TO	OCC		
	GERAN#2	7 7.2.0	2005-11-25			66		loc CR		
	GERAN#2	<u>6 7.1.0</u>	2005-09-16			66	ETSI	OCC CR		

100. 3GPP is a very well-known SDO as of today and certainly was already very well-known in 2007. A person aware of 3GPP could have found TS 44.018 v7.8.0 also via a different route. Searching for "3GPP" leads to the 3GPP website http://www.3gpp.org, as can be seen by the screenshot below:



101. Entering "GSM radio resource control protocol" into the search box of the 3GPP web site provides "Specification # 44.018" as the top result, as can be seen by the screenshot below:



102. Following the provided search result link on "Specification # 44.018" leads to the same 3GPP web page as mentioned in paragraph 99 offering under the tab "Versions" download links to all versions of TS 44.018 including version 7.8.0, as shown by the screenshot below:

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) rtal								
General Vers	sions	Responsibility	Related	Sp	ecific	ation	#: 44.01	8	
<u>OLINN#44</u>	<u>1.13.0</u>	2003-12-10			90	-			
GERAN#43	<u>7.18.0</u>	2009-09-29			66	ETSI TDoc	CR		
GERAN#42	<u>7.17.0</u>	2009-06-12			60	ETSI TDoc	CR		
GERAN#41	<u>7.16.0</u>	2009-03-16			66	ETSI TDoc	CR		
GERAN#40	<u>7.15.0</u>	2008-12-15			60	ETSI TDoc	CR		
GERAN#39	7.14.0	2008-09-22			ସ୍ତ	ETSI TDoc	CR		
GERAN#38	<u>7.13.0</u>	2008-06-13			ଌ୶	ETSI TDoc	CR		
GERAN#37	7.12.0	2008-03-20			66	ETSI TDod	CR		
GERAN#36	<u>7.11.0</u>	2007-12-17			60	ETSI TDod	CR		
GERAN#35	7.10.0	2007-09-25			66	ETSI TDod	CR		
GERAN#34	<u>7.9.0</u>	2007-06-13			66	ETSI TDod	CR		
GERAN#33	<u>7.8.0</u>	2007-03-20			66	ETSI TDod	CR		
GERAN#32	<u>7.7.0</u>	2006-12-11			ହଦ		CR		
GERAN#31	7.6.0	2006-10-02			66	ETSI TDoc	CR		
GERAN#30	<u>7.5.0</u>	2006-07-17			ଟ୍ୟ		CR		
GERAN#29	7.4.0	2006-05-12			ଌ୶	ETSI TDoc	CR		
GERAN#28	<u>7.3.1</u>	2006-02-03			ସ୍ତ		CR		
GERAN#28	7.3.0	2006-02-03			66	ETSI TDoc	CR		
GERAN#27	<u>7.2.0</u>	2005-11-25			ଟ୍ୟ		CR		
GERAN#26	<u>7.1.0</u>	2005-09-16			66	ETSI TDoc	CR		

103. The above example searches illustrate that it is very easy for an interested member of the public without prior knowledge of the TS number and even without prior knowledge of 3GPP to locate any version of TS 44.018, including version 7.8.0, for download.

104. The above searches were performed at the time of writing this report. According to my personal experience, similar searches done in March 2007 or around that timeframe would have similarly provided the path to download version 7.8.0 of TS 44.018.

V. <u>AVAILABILITY FOR CROSS-EXAMINATION</u>

105. In signing this declaration, I recognize that the declaration may be filed as evidence in a contested case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject to cross examination in the case and that cross examination will take place within the United States. If cross examination is required of me, I will cooperate to the best of my ability to appear for cross examination within the United States during the time allotted for cross examination.

A. <u>Right To Supplement</u>

106. I reserve the right to supplement my opinions in the future to respond to any arguments that the Patent Owner raises and to take into account new information as it becomes available to me.

B. <u>Signature</u>

107. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false

67

statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

108. I declare under penalty of perjury that the foregoing is true and correct.

Dated: January 19, 2022

F/b/ml

Friedhelm Rodermund

Appendix A

I. PERSONAL DATA

Name:	Friedhelm RODERMUND
Mailing address:	Am Steiner Graben 18 56077 Koblenz, Germany
Phone:	+49 172 2606489
Email:	friedhelm.rodermund@iotecc.com

II. PROFESSIONAL EXPERIENCE

Summary

Senior expert in telecommunications and Internet of Things (IoT) technology. 25 years of experience within the mobile communications industry, and several years in the IoT domain in various roles such as project management, technology innovation and evolution, standards development, technology strategy, patent creation and support of patent litigations, and development/introduction of new services.

Widely recognized standards expert who was actively involved in leading roles in the development of key standards for mobile telephony/data and service anablers across standards development organizations such as 3GPP, ETSI, GSMA, IETF, OMA, and oneM2M. Currently focussing on standards for the Internet of Things.

Founder and director of IOTECC GmbH which provides consulting services around technologies and standards enabling the Internet of Things, and provides consulting services related to patents for mobile telcommunications and IoT.

01/2015 – present IOTECC GmbH

Koblenz, Germany

Founder and CEO

- Mobile telecommunications, Internet of Things (IoT) and Machine to Machine (M2M) technology and standards consulting
- > Telecommunications and IoT patent consulting
 - Consulting services around telecommunications and IoT patents in particular related to ETSI, 3GPP, and OMA standards
 - State of the art/prior art research services related to patent creation e.g. for new 5G patents
 - Prior art research, patent infringement analysis related to litigations and validity actions
 - Advising on Standards Development Organisations (SDO) working processes and IPR policy, ETSI IPR Special Committee delegate
 - Experienced expert witness (please see section III for a list of supported actions)

11/2014 – 12/2014 Friedhelm Rodermund Consulting

Koblenz, Germany

Internet of Things (IoT) Consultant

M2M/IoT standards development and introduction of new M2M/IoT services

01/2011 – 10/2014 Vodafone Germany / Vodafone Group R&D

Düsseldorf, Germany

Senior Standards Strategist

- Representing Vodafone in various standardisation bodies
- o Driving the standardisation of the Internet of Things
- Work item lead, technical editor and key contributor of Open Mobile Alliance (OMA)
 "Lightweight M2M (LwM2M)" the new standard for the Internet of Things
- Advising and supporting various M2M projects related to e.g. automotive, smart metering, health, industry
- Advising on the introduction of new M2M technologies and services
- Leading Proof of Concepts of emerging technologies
- Involved in innovation projects
- Supporting the creation and protection of Intellectual Property

01/2009 – 12/2010 Vodafone Germany

Düsseldorf, Germany

Vice Chairman Open Mobile Alliance (OMA) Device Management (DM)

- Responsible for Vodafone's Device Management standardisation
- As OMA DM Vice Chairman, co-leading the group, chairing committee meetings and web conferences, steering the technical direction, management of the different work items
- o Editor of several specifications, rapporteur of various work items
- Support of projects for the introduction of device management
- Delegate to 3GPP SA1 where I was responsible for the introduction of MTC (machine type communications) related service/network requirements

01/2005 – 12/2008 Vodafone Germany

Düsseldorf, Germany

Project Manager Mobile Broadcast Standards

- Responsible for Mobile Broadcast standardisation across different broadcast systems/standards bodies and across all Vodafone local operations
- Responsible for Mobile Broadcast standardisation strategy development and implementation
- Delegation Lead for the Open Mobile Alliance (OMA) BCAST working group
- Initiated and managed the BCAST device profile development in the BMCO Forum
- o Leading the "Service Protection" (pay-TV) stream of the German DVB-H Consortium
- Filed several patents
- Supporting patent litigations and patent portfolio evaluation (various technical areas)

04/2003 – 12/2003 GSM Association London, United Kingdom Member of the MMS Task Force • Verification of the MMS operator interworking framework • Supporting the definition and specification of the MMS functional evolution • Acting as a "link" between 3GPP and GSMA in the area of MMS

06/1998 – 12/2004 European Telecommunications Standards Institute (ETSI) Sophia Antipolis, France

01/2002 – 12/2004: <u>Secretary 3GPP Technical Specifications Group "Terminals" and</u> Terminals Working Group 2 "Terminal Services and Capabilities"

01/1999 – 12/2001: <u>Secretary 3GPP Terminals Working Group 2 "Terminal Services and</u> <u>Capabilities" and GERAN 3 "Base Station Testing"</u>

CURRICULUM VITAE

06/1998 – 03/1999: <u>Secretary ETSI SMG4 "Data Services</u>" and SMG8 "Base Station Testing"

- Supported the establishment of 3GPP (3rd Generation Partnership Project) as the leading standards organization for mobile telecommunications
- Project manager and secretary of TSG "Terminals" reponsible for Terminal Conformance Testing, Terminal Services and Capabilities, Universal Subscriber Identity Module (USIM)
- Project manager and secretary of Terminals Working Group 2 "Terminal Services and Capabilities" that was responsible for Terminal Execution Environments, Messaging including Short Message Service (SMS), Cell Broadcast Service (CBS), Enhanced Messaging Service (EMS), Multimedia Messaging Service (MMS), Terminal Interfaces incl. AT-commands, Generic User Profile, Data Synchronization and others
- Establishment and management of the Work Plan and follow-up and report on the progress of the related work items
- Advising the chairmen and the standards groups on technical, procedural and political issues
- Editorship of various GSM and UMTS technical specifications
- Responsible for presenting the technical results of the working groups to the parent body
- Responsible for the communication with other standards bodies inside and outside 3GPP
- PR activities (articles, interviews)

12/1993 – 06/1998 Mannesmann Mobilfunk GmbH

Düsseldorf, Germany

System Engineer and Project Manager in Quality Assurance and Technical Standards

- Leadership and management of acceptance test projects in the area of GSM Base Station Controller (BSC) and GSM Base Station (BTS) hardware and software.
- Leading project teams of around 15 people
- Responsible for the clearance of releasing new software/hardware into the network
- Supported Request for Quotations, supplier evaluation and pre-selection, project manager of System Verification as a central part of the supplier selection process.
- Representation of Mannesmann Mobilfunk to the ETSI standardization group "Standardization Technical Committee SMG3 System Architecture"
- > Conduction of product and hardware development quality audits
- Representative of Mannesmann Mobilfunk in A-interface interoperability testing activities
- Member of BSS product planning group which was defining operator requirements for future BSS releases
- > Development of process improvements for type acceptance
III. LIST OF SUPPORTED PATENT LITIGATIONS AND VALIDITY ACTIONS

Optis Cellular Technology LLC et al. v. Apple Claim No. HP-2019-000006 (High Court of Justice, Business and Property Courts of England and Wales) On behalf of Apple Counsel: WilmerHale Role: Expert witness and consulting services

2020

Panoptis Patent Management LLC et al. v. Apple Inc. Civil Action No. 2:19-cv-66 (E.D. Tex.) On behalf of Apple Counsel: WilmerHale Role: Expert witness (export report, deposition testimony, trial testimony) at bench trial

2020

Sol IP, LLC v. AT&T Mobility, LLC et al. Civil Action No. 2:18-cv-526 (E.D. Tex.) On behalf of AT&T, Verizon, Sprint Counsel: Gibson Dunn Role: Expert witness (export report) and consulting services

2020

Bell Northern Research LLC v. LG Electronics Inc. et al. Civil Action No. 18-CV-2864-CAB-BLM (S.D. Cal.) On behalf of LG Electronics Inc. Counsel: Fish&Richardson Role: Expert witness (declaration) and consulting services

2019

<u>Conversant Wireless Licensing S.a.r.l. v. LG Electronics Deutschland GmbH</u> Civil Action No. 7 O 3277/18 (Landgericht Munich, Germany) On behalf of LG Electronics Deutschland GmbH Counsel: Wildanger Kehrwald Graf von Schwerin & Partner mbB Role: Expert witness (export report) and consulting services

2019

Bell Northern Research, LLC v. Huawei Device Co., Ltd, et al. Civil Action No. 3:18-cv-01784-CAB-BLM On behalf of Huawei Counsel: Fish&Richardson Role: Expert witness (declaration) and consulting services

2019

Uniloc USA, Inc., et al. v. Samsung Electronics America, Inc. and Samsung Electronics Co. Ltd.

Civil Action Nos. 2:18-cv-00040-JRG, 2:18-cv-00041-JRG, 2:18-cv-00042-JRG and 2:18-cv-00044-JRG (United States District Court for the Eastern District of Texas) On behalf of Samsung Counsel: Greenberg Traurig Role: Expert witness (export report, deposition testimony) and consulting services

2019

Uniloc USA, Inc., et al. v. Huawei Device USA, Inc. et al. Civil Action No. 2:18-cv- 00072-JRG-RSP (E.D. Tex.) On behalf of Huawei Counsel: McGuireWoods

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CURRICULUM VITAE

Role: Expert witness (export report) and consulting services

2019

<u>Microsoft Corporation v. Uniloc 2017 LLC</u> Inter Partes Review of U.S. Pat. No. 7,167,487 Inter Partes Review of U.S. Pat. No. 7,075,917 On behalf of Microsoft and on behalf of Apple as joinder petitioner Counsel: Klarquist Sparkman (Microsoft), Erise IP (Apple) Role: Expert witness (declarations) and consulting services

2019

<u>Qualcomm v. KFTC</u> South Korean Case, Seoul High Court On behalf of intervenor Apple supporting the KFTC Counsel: Boies Schiller Flexner Role: Expert witness (trial testimony)

2018/19

Evolved Wireless, LLC v. Apple, Inc. Civil Action No. 1:15-cv-00542-JFB-SRF On behalf of Apple Counsel: DLA Piper Role: Expert witness (export report, deposition testimony) and consulting services

2018/19

<u>Cisco Systems Inc. v. Traxcell Technologies</u> Inter Partes Review of Traxcell Technologies patents On behalf of Cisco Counsel: King&Spalding Role: Expert witness (declaration) and consulting services

2018/19

Qualcomm Inc. v. Apple Inc. Civil Action No. 3:17- cv-02398-DMS-MDD (United States District Court for the Southern District of California) Civil Action No. 3:17-cv-02402-WQH-MDD Certain Mobile Electronic Devices and Radio Frequency and Processing Components Thereof (II), Inv. No. 337-TA-1093 Inter Partes Review of U.S. PATENT NO. 9,154,356 Cases IPR2019-00047, IPR2019-00048, IPR2019-00049, IPR2019-00128, IPR2019-00129 On behalf of Apple and Intel Counsel: WilmerHale Role: Expert witness (declaration) and consulting services

2018/19

Apple Inc. v. Qualcomm Inc. Civil Action No. 3:17-CV-00108-GPC-MDD (United States District Court for the Southern District of California) On behalf of Apple Counsel: Fish&Richardson, Boies Schiller Flexner Role: Expert witness (declaration, expert report, deposition testimony) and consulting services

2018

<u>3G Licensing, S.A. et al. v. LG Electronics Inc. et al</u> Inter Partes Review of U.S. Patent No. 7,995,091 On behalf of LG Electronics Counsel: Fish&Richardson Role: Expert witness (declaration)

2017

Huawei Technologies Co. LTD. v. T-Mobile US, Inc. & T-Mobile USA, Inc.

CURRICULUM VITAE

E.D. Tex. Case Nos. 2:16-cv-00052-JRG-RSP; 2:16-cv-00055-JRG-RSP; 2:16-cv-00056-JRG-RSP; and 2:16-cv-00057-JRG-RSP On behalf of T-Mobile Counsel: Gibson Dunn Role: Expert witness (expert reports, deposition testimony) and consulting services

2016

Koninklijke KPN N.V. v. Samsung Electronics America, Inc. et al. Civil Action No. 14-cv-1165 On behalf of Samsung Electronics Counsel: Baker Botts Role: Expert witness (declaration and deposition testimony) and consulting services

2016

<u>SSH v. Sony</u> OLG Düsseldorf, Germany On behalf of SSH Counsel: Cohausz&Florack Role: Technical expert support

2015/16

LG Electronics v. Core Wireless Licensing S.A.R.L. Inter Parles Review of U.S. Patent No. 8,165,049 On behalf of LG Electronics Counsel: Greenberg Traurig Role: Expert witness (declaration and deposition testimony)

2015/16

<u>Core Wireless Licensing S.A.R.L. v. LG Electronics Inc. and LG Electronics MobileComm</u> <u>U.S.A., Inc</u> Civil Action No. 2:14-cv-911 (lead case) and Civil Action No. 2:14-cv-912 (consolidated) On behalf of LG Electronics Counsel: Greenberg Traurig, Sidley Austin Role: Expert witness (expert report and deposition testimony)

2015

Intellectual Ventures I LLC v. T-Mobile USA, Inc. & T-Mobile US, Inc. D. Del. Case No. 1:13-cv-01632 Intellectual Ventures II LLC v. T-Mobile USA, Inc. & T-Mobile US, Inc. D. Del. Case No. 1:13-cv-01633 On behalf of T-Mobile Counsel: Gibson Dunn Role: Technical expert support

IV. EDUCATION

- 10/1984 10/1993
 University of Technology Aachen
 Aachen, Germany

 Graduate of Electrical Engineering with a focus on telecommunications technologies (Dipl.-Ing. TH)
 (Dipl.-Ing. TH)
- 10/1992 04/1993
 University of Technology Trondheim
 Trondheim, Norway

 Diploma Thesis "Design of a dual processor computer for digital signal processing in power electronics"
 Signal processing in power for digital signal processing in power electronics

V. LANGUAGES

German, English, French

VI. RECENT PUBLICATIONS

- > "Unlocking the internet of things and driving the need for interoperability", Global Telecoms Business, December 2013
- ⊳ "The need for standardisation in the M2M services layer", Global Telecoms Business, February 2014
- Co-authored white paper "Lightweight M2M: Enabling device management and applications for the internet of things", Open Mobile Alliance, March 2014 "Objects are a new way to create M2M applications", Global Telecoms Business, April
- ⊳ 2014
- \geq "The need for standardisation in the M2M services layer", M2M Now, July 2015

Appendix B

TSGR1-01-0188

TSG-RAN Working Group 1 meeting No. 19 February 27- March 2, Las Vegas, U.S.A.

Agenda Item:

Source: Secretary

Title: Draft minutes of WG1 #18 meeting

Document for: Approval

Draft Minutes for 3GPP TSG-RAN WG1 18th Meeting

Meeting start: January 15th, 2001, in Boston, MA, U.S.A.

Day 1, started at 09.17

1. **Opening of the meeting** (09:17-09:21)

The chairman, Mr. Antti Toskala (Nokia), opened the meeting. On behalf of the hosting company, the representative welcomed the meeting.

2. Approval of agenda (R1-00-1498) (09:22-09:36)

Chairman made a brief introduction of the agenda on the screen.

Regarding HSDPA discussion, chairman suggested that we should treat items which have direct link to RAN WG2 a bit later because RAN WG2 was having Ad Hoc session for Rel-4/5 issues in parallel with us on Monday and Tuesday in UK and we were expecting some information from their meeting. Chairman suggested that simulation results and issues on implementation complexity aspects could be covered first without minding RAN WG2 discussion. Mr. Guiliang Yang (CWTS) requested postponing of 1.28Mcps Ad Hoc one day because of the preparation status. Having this request, chairman decided not to have parallel Ad Hoc sessions on Day2 that had been originally suggested in the draft agenda.

Agenda was approved with no other comments.

3. Report from TSG RAN#10 From Bangkok (R1-01-0067) (09:52-10:17)

1. Release 99 CRs

All Release '99 CRs WG1 presented were approved by TSG RAN.

2. Open item for release 99

1st interleaver memory with the UE capabilities was reported to TSG RAN as an open Release'99 item under discussion in WG1

3. TS on UE capabilities

New Release 99 specification was created out of TR 25.926. TS 25.306 replaced TR 25.926, with the first version 3.0.0 as agreed in TSG RAN. Thus any UE capability issue (FDD or TDD) is to be reflected for TS 25.306. The 1.28 Mcps TDD UE capabilities need to be reflected to this TS as well. The TR on 1.28 Mcps TDD UE capabilities is for 3GPP internal use only (as all 25.8xx series).

(Chairman clarified this because there had been a question in the RAN WG1#17 meeting whether there would be a separated specific TR on 1.28 TDD UE capabilities. Now it was clarified that all UE capabilities issues should finally go to TS 25.306.)

4. How to proceed with CRs for release 99 and release 4

- In case we produce CRs which would impact both releases then 2 sets of agreed CRs need to be created – i.e. one per release.

- But before release 4 specifications have been created, even if the change will impact on both release, the only CR for release 99 is to be made. MCC will implement release 99 CRs until release 4 specifications have been created. When creating release 4 specifications, all TSG approved CRs for release 99 shall also be implemented in the release 4 version.

- Once release 4 specifications have been created, then those release 4 specifications would deviate from release 99 specifications by being applied release 4 specific CRs

5. Release 4/5 issues

1) Terminal power saving feature (DPCCH gating)

- The WG1 TR 25.840 was presented to TSG RAN as 2.0.0.
- The milestone remained 03/01.
- WG2 reported uncertainty whether they have conclusions/consensus on all the aspects of this feature for 03/01. WG1 TR stayed as 2.0.0
- Impact of compressed mode (on the gains) was mentioned as one issue which WG1 should cover as well.

2) DSCH power control improvement in soft handover

- TR 25.841 was presented and approved by TSG RAN.
- TR is now version 4.0.0 and under CR process if there is need for change.
- WG3 has draft TR on this under preparation

3) TDD Node B synchronization

- The TR 25.836 was presented and approved by TSG RAN to 4.0.0
- The milestone was kept as 03/01

4) Uplink Synchronous Transmission Scheme

- WG1 indicated that study report would be delivered 03/01

- The milestone for the study report was kept was 03/01

- 5) 1.28Mcps (Low Chip Rate) UTRA TDD Physical Layer
 - There was not much discussion on RAN WG1 issues.
 - Issues to work with still as reported to TSG RAN
 - 1: Uplink synchronization
 - •2: Handover measurements for GSM for data rates above 32 kbits/s
 - TDD status of co-existence studies were briefly discussed in TSG RAN.
 - It was decided that the base station to base station interference scenario needs to be further analysed and solutions for interworking needs to be found. RAN WG4 was tasked to do this work.
 - RAN WG1 was requested to submit TR 25.928 for approval for RAN for RAN #11 although we are now working on *Working CRs*.

6) Smart Antennas

Work item was deleted. There was no topic identified to be worked on under this work item.

7) High Speed Downlink Packet Access (HSDPA)

- There had been activity only in RAN WG1 on this topic (since TSG RAN#9).
- RAN WG2 expected to address the topic beginning of this week (Jan 15 -16).
 - •Some inputs from RAN WG2 could be expected during RAN WG1#18 meeting.
- Joint Ad Hoc between RAN WG1 and RAN WG2 was suggested by TSG RAN. This will be coordinated with
- RAN WG2 chairman after the RAN WG2 has addressed HSDPA during their current meeting.

8) Other Topics

- -Hybrid ARQ
 - No activity reported, most likely to be covered as part of HSDPA
- Improved cell FACH state
 - No activity reported

- Positioning

- WG1 chairman's understanding is that OTDOA-PE method is not for Release 4 time frame.
- Tx Diversity
- We aim to have our conclusion for June for release 5.
- 9) TSG RAN/SA level workshops agreed
 - TSG RAN Workshop UTRAN Evolution, Feb. 5-6

Based on the contributions presented in TSG RAN#10, TSG RAN felt that there is a need to organize a 2-day workshop discussing the UTRAN evolution beyond Release 4, i.e., on IP based UTRAN architecture, Iub, Iur, Iu and possible new internal UTRAN interfaces. The goal of the workshop is to identify requirements for the UTRAN evolution in co-operation with other groups that may have requirements or

otherwise are linked to the UTRAN evolution. In addition, individual companies are invited to provide their vision of the UTRAN evolution.

- TSG SA workshop UE in idle mode, Feb 7-8

The goal of the workshop is to review and address the following topics, both from a requirement and functional point of view:

- •PLMN selection
- •Cell selection and reselection
- •Handovers
- 10) RAN Plenary will have 4 days meetings from RAN #11 onwards.

4. Identification of the incoming liaison statements and actions in the answering

No.	Title	Source	To/Cc	Tdoc No.	Originator of the LS	Notes
1	Liaison to RAN WG1 and RAN WG2 on the Efficiency of Packet-Switched Conversational Multimedia Service	SA WG4	ТО	R1-01-0029 (S4-000700R)	Siemens	Answer LS will be sent (*1)
2	On Iub NBAP Signalling Support for CPCH	RAN WG3	CC	R1-01-0028 (R3-003105)	Samsung	Noted (*2)
3	Response to LS on request to review timing requirements in Idle mode test cases	CN WG1	CC	R1-01-0027 (N1-001329)	Ericsson	No Comments Noted (*3)
4	LS on Results of HSDPA Study Item Ad Hoc	R2	ТО	R1-01-0145 (R2-010205)	Motorola	(*4) _{Day3 13:50-14:06}

(*1) Chairman presented this LS.

SA WG4 is setting up a new work item called "Multimedia Codecs and Protocols for Conversational Packet-Switched Services" that is targeting Rel4 and Rel5. And then they confronted questions on the efficiency constraint caused by applying RTP onto AMR speech codec, that is the impact of equal error protection rather than unequal protection. They listed 3 questions for RAN WG1 as well as RAN WG2 regarding the efficient solutions for the transportation of such RTP encapsulated media.

Ms. Evelyne Le Strat (Nortel) commented.

As for the impact of equal error protection, we had done some evaluation last year performed by NTT DoCoMo and Nortel on different coding strategies and so we should be able to provide some indication on this. However regarding the question on how we could effectively do unequal error protection if we are in packetswitched domain, RAN is not appropriate group to provide indication because the request is for the core network when they made question on the sub-flows with different quality of services. We provide radio bearers, all the transport channels to provide such quality of service. But we do not see RTP payload. We are relatively transparent. So question is to be answered by SA group itself.

Chairman agreed with this opinion and added that we had to be careful in answering the gain of unequal vs. equal error protection because what has been done studied for this is circuit-switched domain AMR. If there are some headers that need some kind of error protection, it would have an impact on the situation. So we have to say that our answer, for instance, the gain of 1dB does not include any impacts on quality of service by RTP header, etc. Finally chairman asked Ms. Evelyne Le Strat to draft an answer liaison statement. It was drafted in **R1-01-0090** and reviewed on Day4 and approved in **R1-01-0170**. (See No. 109)

/** Coffee break 10:33-11:15 **

(*2) Delegate from Samsung presented this LS.

This LS was sent from RAN WG3 as the answer to the LS from RAN WG2 (R3-002350, R2-001846) on Iub NBAP signalling support for CPCH.

Ms. Evelyne Le Strat (Nortel) pointed out that there are again some terminology problems mixing CPCH with CPCH set and mixing the access resource with traffic resource.

Chairman agreed with this comments.

(*3) Mr. Dirk Gerstenberger (Ericsson) presented this LS.

This LS was sent from CN WG1 as the answer to the LS from T WG1(N1-001167, T1-000161) in which T WG1 had requested CN WG1 to review the attached documents (those documents were also attached to this LS) on timing requirements in idle mode. In this LS CN WG1 stated that these timing requirements should also be reviewed and studied in RAN WG1, RAN WG2 and GERAN WG2.

Chairman commented that we should somehow inform our RAN WG4 colleagues about this document because this is about the timing requirements and RAN WG4 would be impacted. He added this topic would come up in the Work Shop on UE idle mode (See section 3-9) and this is expected to be handled in that workshop.

(*4) See No. 57

5. Issues postponed / identified in RAN WG1 #17

5.1 Preconfigurations for GSM handover

No.	Tdoc	Title	Source	Conclusion	Notes
5	R1-01-0037	Proposed parameter values for default configurations	Ericsson	17:00-52	(*1) Dayl 12:06

(*1) Mr. Dirk Gerstenberger (Ericsson) presented this document.

In RAN WG1#17 we received the LS (**R1-00-1412**, R2-002463) from RAN WG2. RAN WG2 was requesting us to provide some guidance on the parameter values for default configurations, the values for some transport channel and physical channel parameters which are not covered in TS 34.108. In RAN WG1#17 though we made a discussion on this request we could not reach the conclusion partly because the background of RAN WG2 request was notquite clear from the LS. Chairman suggested offline discussion in RAN WG1#17.

Now with this paper Mr. Dirk Gerstenberger explained the background of RAN WG2 LS and proposed the answer values for the following configurations with rationales.

- 13.6 kbps SRB

- 12.2 kbps speech + 3.4 kbps SRB

- 64kbps conv. CS- data + 3.4 kbps SRB

- 57.6 kbps streaming CS- data + 3.4 kbps SRB

There were some discussions.

1. PC preamble length 0.

In case RRC connection has not yet been established on the handover, then RRC connection establishment message would be transmitted first of all and therefore PC preamble length 0 can be considered inappropriate.

- → Major opinion preferred to keep it 0 as it was proposed. The reason was same as described in the rationale section of the paper.
- 2. Regarding uplink DPCCH power control, are the 2 parameters of power control step size and uplink power control algorithm going to be informed ? or would there be default values ?
 - → In case there would be default values then they should be normal algorithm (algorithm1) and normal 1 dB power control step size. This should be mentioned in the LS to RAN WG2.
- 3. Regarding dpcch-PowerOffset, in case no bits are available for message, it would be better to use 1dB or something else as the default value.

As a conclusion, LS to RAN WG2 shall be created including the comments received. LS would be drafted by Mr. Dirk Gerstenberger in **R1-01-0101**. This was reviewed on Day 2 and approved. (See No. 105)

Finally chairman added that if companies would submit proposals for the values for the default configurations which are not covered by this document, those proposals should be posted on RAN WG1 reflector as well so that RAN WG1 people can review them before those proposals go to RAN WG2.

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
6	102	-	25.212	R1-01-0057	Limitation on the downlink rate matching repetition	F	Panasonic	Postponed	(*1) Day 1 12:08-12:26
7	xxx	-	25.306	R1-01-0040	Downlink rate matching limitation	F	Ericsson	Postponed	(*1) Day 1 12:27-12:34
8	xxx	-	25.306	R1-01-0010	Clarifications to UE capability in the first de-interleaving phase	F	Nokia	Postponed	(*1) Day 1 12:34-12:42
9	-	-	-	R1-01-0169	Repetition limitation discussion	-	Panasonic Ericsson Nokia	Noted	(*2) Day 4 12:06-12:38

5.2 Limitation on the downlink rate matching repetition

(*1) R1-01-0057 was presented by Mr. Hidetoshi Suzuki (Panasonic).

R1-01-0040 was presented by Mr. Dirk Gerstenberger (Ericsson)

R1-01-0010 was presented by Mr. Markku Tarkiainen (Nokia)

All these 3 documents treated the problem of unlimited downlink rate matching repetition on UE memory requirements which had been originally raised by **R1-00-1456** (Panasonic and Mitsubishi) in RAN WG1#17 meeting. Since it was foreseeable that it would take time to reach conclusion, chairman suggested the offline discussion over the lunch by the proponents and interested parties after having short introduction of these papers in the plenary before the lunch break.

R1-01-0057 proposed to limit the transport channel capabilities in TS 25.212 by putting the upper limits to each of the transport channel capabilities (all transport blocks, convolutional coded transport blocks and turbo coded transport blocks defined in TS 25.306.).

R1-01-0040 proposed to put one limitation on the maximum number of bits of all transport blocks in TS 25.306.

R1-01-0010 also proposed to make changes in TS 25.306. $^{\prime ** \prime }$ Lunch break 12:43-14:06 $^{** \prime }$

After lunch break it was announced by the proponents that they would need more time to reach conclusion. Chairman remarked that we would come back to this again later. (See No.9)

(*2) The issue of limitation on the downlink rate matching repetition was revisited on Day4 noon.

Mr. Hidetoshi Suzuki (Panasonic) explained current situation with this table which compares the proposals of 3 companies.

At this moment of time the consensus had not yet been reached by 3 companies.

Panasonic and Ericsson proposals would not introduce new capability classes and hence can be applicable to either TS 25.212 or TS 25.306 however Nokia's proposal request new capability class and is only implemented to TS 25.306.

Conclusion had not been reached before the lunch break but during the offline discussion in the lunch break it was reached and LS was drafted. (See No.115)

/** Lunch break 12:40- 13:44 **/

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
10	092	-	25.211	R1-01-0056	Clarification of the S-CCPCH frame carrying paging information	F	Panasonic	Rejected LS would be sent.	(*1) Dayl 14:32
11	091	-	25.211	R1-01-0034	DSCH reading indication	F	Ericsson	Approved	No (*2) Comments
12	104	-	25.212	R1-01-0077	Addition of compressed mode gap length "8 slots"	С	Nokia	Postponed	(*3) Davi 14:52
13	144	-	25.214	R1-01-0052	Removal of the power balancing algorithm from TS 25.214	F	NEC	Approved	No (*4) Comments Dayl 14:58
14	145	-	25.214	R1-01-0053	Clarification of Nid parameter – when SSDT and uplink compressed mode are in operation	F	NEC, Telecom Modus	Approved	No (*5) Comments Dayl 15:02
15	146	-	25.214	R1-01-0085	Clarification of closed loop transmit diversity mode 1 and mode 2 operation during compressed mode	F	Motorola	Approved	No (*6) Comments Dayl 15:05
16	079	1	25.215	R1-01-0076	Correction of the observed time difference to GSM measurement	F	Nokia	To be revised	(*7) Dayl 15:14
17	081	-	25.215	R1-01-0071	Removal of UE SIR measurement	F	Ericsson	Approved	(*8) Dayl 15:25
18	039	-	25.221	R1-01-0016	Corrections of PUSCH and PDSCH	F	Siemens	To be revised	(*9) Dayl 16:15
19	045	-	25.224	R1-01-0016	Introduction of closed-loop Tx diversity for the PDSCH and DTX for the PUSCH/PDSCH	F	Siemens	Approved	No Comments Dayl 16:15
20	037	1	25.221	R1-01-0019	Bit Scrambling for TDD	F	Siemens	Approved	No (*10) Comments Dayl 16:27
21	051	1	25.222	R1-01-0019	Bit Scrambling for TDD	F	Siemens	Approved	No (*10) Comments Dayl 16:27
22	040	-	25.221	R1-01-0021	Alteration of SCH offsets to avoid overlapping midamble	F	Siemens	Postponed	(*11) Dayl 16:34
23	041	-	25.221	R1-01-0022	Clarifications & Corrections for TS25.221	F	Siemens	Postponed	(*12) Dayl 16:41
24	054	-	25.222	R1-01-0023	Corrections & Clarifications for TS25.222	F	Siemens	Postponed	(*12) Dayl 16:41
25	046	-	25.224	R1-01-0017	Corrections of TDD power control sections	F	Siemens	Approved	No (*13) Comments Day 1 16:46
26	142	-	25.214	R1-01-0024	Uplink power control in compressed mode	F	Philips	To be revised	(*14) Day 1 16:52
27	142	1	25.214	R1-01-0112	Uplink power control in compressed mode	F	Philips	Approved	No (*15) Comments Day 4 11:51
28	079	2	25.215	R1-01-0107	Correction of the observed time difference to GSM measurement	F	Nokia	Approved	No (*16) Comments Day 4 11:54
29	023	-	25.225	R1-01-0107	Correction of the observed time difference to GSM measurement	F	Nokia	Approved	No (*16) Comments Day 4 11:54
30	039	1	25.221	R1-01-0111	Corrections of PUSCH and PDSCH	F	Siemens	Approved	No (*17) Comments Day 4 11:58
31	040	-	25.221	R1-01-0021	Alteration of SCH offsets to avoid overlapping Midamble	F	Siemens	Approved	No (*18) Comments Day 4 12:00
32	041	-	25.221	R1-01-0022	Clarifications & Corrections for TS25.221	F	Siemens	Approved	No (*19) Comments Day 4 12:01
33	054	-	25.222	R1-01-0023	Corrections & Clarifications for TS25.222	F	Siemens	Approved	No (*19) Comments Day 4 12:01
34	037	-	25.224	R1-01-0073	RACH random access procedure	F	InterDigital	Approved	(*20) Day 4 14:08
35	036	-	25.224	R1-01-0153	DTX and Special Burst Scheduling	F	InterDigital	Approved	No Comments Day 4 14:12

6. Change Requests for WG1 Release –99 specifications

(*1) Mr. Hidetoshi Suzuki (Panasonic) presented this CR.

This CR proposed to clarify that the S-CCPCH which carries the paging information should be one single frame. The rationale behind this proposal is that if it is sure that paging associated S-CCPCH would be sent in one single frame and not in multiple frames, UE would be able to turn off the receiver in order to improve the power consumption as soon as it has received that one S-CCPCH.

There were several comments.

- If this kind of CR is to be approved in RAN WG1 then similar kind of CR should be approved in RAN WG3. - That paging associated S-CCPCH is single is already clearly stated in the first sentence of that section (7.2).
- "*Figure 30 illustrates the timing between <u>a</u> <i>PICH frame and <u>its associated</u> S-CCPCH <u>frame</u>, (singular)" If we put the word "single" as is proposed in the CR, it means there could be multiple frames. In that case the plural would be used in the first sentence instead of singular.*
- Are we really sure that there would not be consecutive messages to the same UE sent by the network ?
 Are we sure whether the scenario of consecutive frames on paging indicator channel is allowed or not ?
 Can UEs buffer more than 2 consecutive frames once it receives paging indicator channel ?

Conclusion : This CR was rejected. LS would be sent to RAN WG2 and RAN WG3 asking whether there would be consecutive frames on the paging indicator channel or not.

LS would be drafted in R1-01-0105. This was reviewed on Day4 and approved. (See No. 108)

(*2) This CR proposed to remove the option of higher layer signalling to indicate UE should read the DSCH because DSCH reading indication by higher layer signalling is not supported in RRC.

This CR had been sent on the e-mail reflector prior to the meeting.

(*3) Mr. Ville Steudle (Nokia) presented this CR.

This CR proposed the addition of compressed mode gap length of "8 slots" in TS 25.212 following the decision made in RAN WG4. (RAN WG4 had decided to include a compressed mode transmission gap length of 8 slots into their specifications.)

There were some comments that since this was something more than correction and therefore we need to have more information on the benefits of using transmission gap length of 8 from RAN WG4. Furthermore it is a bit late to introduce this kind of changes even if we could agree to the motivations.

Chairman suggested 2 approaches;

1. If everybody is happy then we consider this as a release 99 correction.

2. We consider this as an improvement of inter-frequency measurements (release 4)

It was suggested to send a liaison statement to RAN WG4 to ask the background of their change. The LS was drafted in **R1-01-0106** by Mr. Ville Steudle. It was reviewed and approved in **R1-01-0167** on Day4. (See No.107) (It was informed by Mr. Ville Steudle that there would be a liaison statement from RAN WG4 on this issue.) The decision of this CR was postponed.

(*4) Mr. Takashi Mochizuki (NEC) presented this CR.

This CR proposed to remove the description of the power-balancing algorithm from TS 25.214 in order to make specifications consistent because the power-balancing algorithm was described in TS 25.214 and TS 25.433 in a different manner. (In TS 25.433 it was described as normative whereas in TS 25.214 informative.) According to the proponent TS 25.433 had been modified in RAN in September, 2000 in this respect.

(*5) Mr. Takashi Mochizuki (NEC) presented this CR.

This CR proposed to clarify the definition of N_{id} parameter because current definition was considered misleading. (*6) It was proposed to remove the irrelevant text from section 7.2.3.1 and 7.3.3.1 which implies a UE could receive

- CPICH during a downlink compressed mode gap.
- (*7) Mr. Ville Steudle (Nokia) presented this CR.

This CR proposed to clarify the definition of "Observed time difference to GSM cell" in TS 25.215 by adding the relationship between measurement and reported value.

A couple of comments were made that the added description was somewhat unclear and should be modified.

"For calculating the reported time difference, the frames are assumed to be ideal." Is this clear? "For the actual measurement, the reference points shall be:" the term reference point is already used for different purpose.

So this was set to be revised. Chairman requested the proponents to add more words to the "reason for change" field in the cover sheet in conformity to RAN practice. The revision was made in **R1-01-0107** and reviewed on Day4 and approved with no comments. (See No.28,29)

(*8) Mr. Dirk Gerstenberger (Ericsson) presented this CR.

This CR proposed to remove the SIR measurement from the UE measurements in TS 25.215 because SIR measurement by UE is a physical layer internal measurement and is not reported by UE to UTRAN in any RRC messages. No performance requirements on SIR measurement are specified in TS 25.113.

Mr. Matthew Baker (Philips) remarked that deleting SIR measurement itself would not be a problem but somewhere in the specifications there should be retained the definition of SIR target or the information regarding SIR measurement, something like (RSCP/ISCP)x(SF/2) because otherwise there would be confusion in downlink power control with UEs having different definition of SIR targets. For instance some UEs would take into account the spreading factor in their definition and other UEs would not include it.

There took place some discussion regarding this comment. Major concern was that it is the definition of SIR target that would be needed and not the definition of SIR.

Finally chairman concluded based on the comments received that the removal of the SIR measurement from TS 25.215 which is proposed in this CR is fine because SIR measurement would not be reported over the air but at the same time the definition of SIR target including the definition of SIR should be retained in the informative annex

of TS 25.214 because otherwise there would be an impact on the downlink power control as Mr. Matthew Baker pointed out. Chairman stated that this CR was approved here with the condition that another CR for TS 25.214 should be submitted to RAN with this CR. Chairman asked Mr. Matthew Baker to draft a CR for this purpose. **R1-01-0108 CR 25.214-148** was allocated for this CR. This CR was not presented during this meeting. Siemens will check whether a similar change request (removal of SIR measurement for TDD) is needed or not. (In RRC, for FDD part Nokia presented CR to remove SIR measurement in the previous RAN WG2 meeting, but for TDD part there likely still remains SIR measurement.)

/*** R1-01-0108 would be discussed on the e-mail reflector prior to the next meeting. ***/

(*9) It was proposed by the proponent to add "Note" in section 5.3.6.4 to state that the method 1) and 2) are not supported in release 99.

Mr. Alexander Lax (3G.com) questioned whether it is possible to rephrase the last sentence in section 5.3.6 from "only one UE may share the PDSCH time slot at the same time" to

"only one UE may share the same PDSCH time slot"

It was answered that here intention is not only the same time slot but also the same slot and the same frame and therefore this rephrasing would be misleading.

Chairman suggested rewording could be possible to clarify the relation with TTI.

As a conclusion, this CR was to be revised to add one "Note" and to modify the section 5.3.6.4 to reflect the comments received. Chairman suggested that the "reason for change" field would be better to have more words, for instance the description of what currently is missing.

The revision can be found in **R1-01-0111**. This was reviewed on Day4 and approved with no comments. (See No.30)

/*** But this revision is not based on the current spec but on the **R1-01-0016** with respect to section 5.3.6.4. This should be revised again before RAN submission. ***/

(*10) Mr. Marcus Purat (Siemens) presented this CR.

In RAN WG1#17 meeting (in the TDD Ad Hoc), it was already proposed to have bit scrambling function in order to solve the problematic situation where the data to be transmitted have DC offset due to the long sequence of same data symbol. (**R1-00-1340**) But there had been raised a concern regarding the usage of bit scrambling for uplink.

In this paper Siemens clarified the necessity for the uplink bit scrambling. (Even if the NodeB's receiver may be DC coupled, the transmitter of a simple UE may cancel the DC offset. The scrambling polynomial and the scrambling function itself will be implemented in the UE in any case for DL.)

As for the actual CRs there had been made some notational change to those presented in RAN WG1 #17. (*11) Mr. Marcus Purat (Siemens) presented this CR.

This CR proposed to change the formula that gives t_{offset} for the SCH codes in order to avoid overlap midamble. Simulation results were presented to show the improvement which new sync offsets will have. It was requested to postpone the conclusion to Day3 so that people can check in detail.

Chairman accepted this request and postponed the approval to Day4. (See No. 31)

(*12) Mr. Marcus Purat (Siemens) presented these CRs.

There has been a discussion about the re-allocation of coding section for layer1 control command (TPC and paging indicator) from TS 25.222 to TS 25.221 because though we can consider it as a kind of coding it is not really coding.

R1-01-0022 contains CR 25.221-041 in which coding of TPC is transplanted in section 5.2.2.5 from TS 25.222. R1-01-0023 contains CR 25.222-054 in which coding of TPC is removed. (Whole section 4.3.3 is to be removed.) However R1-01-0023 CR 25.222-054 contained other 2 independent changes regarding the information on SF selection in the rate matching section (4.2.7.1) and numbering of physical channels in section 4.2.11. Although there was no comment on the change for re-allocation of coding of TPC description there was a request to postpone the conclusion to Day3 with respect to other changes in R1-01-0023. Therefore the approval of both documents was postponed to Day4. (See No. 32, 33)

/*** R1-01-0020 was postponed to the next meeting. ***/

- (*13) This CR proposed to remove the description of TDD open loop power control for the uplink from TS 25.224 because it is also described in TS 25.331. There is a corresponding CR in RAN WG2 which adds some details of open loop power control in TS 25.331 which had been covered in TS 25.224.
- (*14) Mr. Matthew Baker (Philips) presented this CR.

This CR proposed to make a correction to the CR which had been approved in RAN WG1#17 (**R1-00-1400** CR 25.214-140) in terms of terminology. This CR introduced Δ SIR_{PILOT} instead of Δ PILOT in the calculation of SIR_{em target} to avoid potential misunderstanding in section 5.1.2.3.

Mr. Ville Steudle (Nokia) pointed out that the term "transmission gap patterns" should now be replaced by "transmission gap pattern sequences".

Mr. Matthew Baker agreed with comment and stated that he would provide the revision to incorporate this comments. The revision can be found in **R1-01-0112**. This was reviewed on Day4 and approved. (See No. 27)

- (*15) This is the revision of R1-01-0024 which was reviewed on Day 1. (See No. 26) (Above notes) "transmission gap patterns"s have been replaced by "transmission gap pattern sequences"s.
- (*16) This is the revision of **R1-01-0076** which was reviewed on Day 1. (See No.16) The corresponding CR for TS 25.225 (CR 25.225-023) was added in this revision.
- (*17) This is the revision of **R1-01-0016** which was reviewed on Day 1 (See No. 18). Since this CR is based on the R1-01-0016, this must be revised again.

- (*18) It was requested on Day1 to postpone the decision of this CR in order to have offline checking. (See No.22) This was revisited on Day 4 and approved without being reviewed again.
- (*19) It was requested on Day1 to postpone the decision of these CRs in order to have offline checking. (See No.23, 24)
- These were revisited on Day 4 and approved without being reviewed again.
- (*20) Mr. Stephen Dick (InterDigital) presented this CR.

TS25.224, Section 4.7 *Random access procedure* contained several inconsistencies. It referred to sub-channels, but did not define sub-channels for TDD. It also described overall process functionality without clearly segregating the Layer 1 functions from those of the higher layers.

There were 3 coordinating CRs to RAN WG2 and RAN WG3. Mr. Stephen Dick stated that he had confirmed by the telephone that both RAN WG2 and RAN WG3 had approved those CRs.

Chairman stated responding to a comment that if there were problems with this or with any other coordinating CRs found before the next meeting, we can discussed them in the next meeting. He added that we can put CRs on-hold as well in the RAN plenary.

/*** R1-01-0020 was postponed to RAN WG1 #19 ***/

Day 2, started at 09.00

7. Release 4/5 issues

Ad Hoc configuration

- AH21 : TDD 1.28 Mchips functionality
- AH22 : Terminal power saving features
- AH23 : Compressed mode
- AH24 : High speed downlink packet access

AH25 : Hybrid ARQ

AH26 : Tx-diversity

AH27 : Radio link performance enhancements

- AH28 : Improved Common DL Channel for Cell FACH State
- AH29 : Positioning

AH30 : TDD NodeB synchronisation

AH31 : Uplink Synchronous Transmission

7.1 High Speed Downlink Packet Access (Ad Hoc 24)

7.1.1 Reviewal of the revised TR (TR 25.848 v0.2.1) (Day1 17:37-18:45)

At the end of the RAN WG1#17 meeting, the new revision of the TR (v0.2.0) was distributed in **R1-00-1480** by Motorola. At that time it was not reviewed because the document was pretty big and apparently it needed offline checking. Prior to RAN WG1 #18 there had been comments made to the v0.2.0 on the e-mail reflector and Motorola made a further revision (v0.2.1) to reflect those comments and sent it on the e-mail reflector with the file name "**R1-00-18xx-HSDPA-TR 25 848.zip**". (This file was not provided in the meeting.)

Mr. Amitabha Ghosh (Motorola) presented this revision on the screen and explained what had been done so far on the sections regarding "Simulation assumptions", "Simulation results", "Complexity" (all in section 7). Those sections which have direct link to RAN WG2 would be reviewed later.

There were several comments made and discussions took place.

- Section 7.1.1. 'Conclusion' should be modified to clarify that these simulation results assume that MCS level does not change in the re-transmission and further these assume AMC in conjunction with HARQ.
- Section 7.2 'Hybrid ARQ' No comments. There would be Nokia proposal on this section.
- Section 7.4.1 'MIMO performance evaluation'

Mr. Serge Willenegger (Qualcomm) remarked that there would be some introduction text needed in the header that clarifies that this is the initial state of results and specific set of simulation conditions was provided by single company because these results have not been confirmed by other companies and the conditions of the simulation have not been confirmed to be representative of typical environment.

At first Lucent opposed this proposal but finally agreed to this suggestion saying that text can be changed in the future. Lucent also encouraged the people to do the simulations and provide the results in the next meeting. After some discussion chairman concluded that a small text as following would be better to be inserted somewhere in the text on the *system level* simulation results.

" It may be noted that the **system level simulation** did not use all the assumptions as outlined in Annex A." - Chairman suggested to create new (blank) section 7.4.3 for "MIMO Node-B Complexity Evaluation"

- Section 7.4.2 'MIMO UE Complexity Evaluation'

Motorola made a comment which is summarized in **R1-01-0109**.

Chairman suggested to leave section 7.4.2 with revision mark because we would see R1-01-0109 later. - Mr. Volker Höhn (Mannesmann Mobilfunk) questioned whether the impacts on Iub/Iur aspects should be included or not. Chairman answered that we could expect RAN WG2 and RAN WG3 to do it.

New revision (v0.3.0) that includes all of the comments received can be found in R1-01-0117. $^{\prime ***}$ Dayl closed at 18:46 ***/

7.1.2 Reviewal of T-docs related to HSDPA Taking into account of the parallel RAN WG2 Ad Hoc session, Chairman organised presentation so that the simulations and complexity issues could be treated first.

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
36	24	R1-01-0006	Text proposal on HARQ complexity to TR25.848	Nokia	To be revised	(*1) Day 3 09:09-09:38
37	24	R1-01-0059	UE complexity for AMCS	Sony	Noted	(*2) Day 2 09:38-09:54
38	24	R1-01-0060	Text Proposal for AMCS complexity evaluation section of TR25.848	Sony	To be revised	(*3) Day 2 09:55-09:58
39	24	R1-01-0044	Performance Comparison of Hybrid-ARQ Schemes – Additional Results	Motorola	→ Text proposal	(*4) Day 2 10:06-10:24
40	24	R1-01-0004	System Level simulation results of HSDPA estimating downlink channel quality from the transmit power of DPCH	Panasonic	Noted	(*5) Day 2 10:26-10:38
41	24	R1-01-0046a	HSDPA system performance with/without FCS (faded but no motion)	Motorola	→ Text Proposal	(*6) Day 2 11:15-11:37
42	24	R1-01-0047	HSDPA system performance with/without CPICH errors and H-ARQ	Motorola	→ Text Proposal	(*7) Day 2 11:38-11:50
43	24	R1-01-0049	HSDPA system performance based on simulation (II update \rightarrow III)	Motorola	→ Text Proposal	(*8) Day 2 11:50-11:52
44	24	R1-01-0102	Multipath Interference Canceller (MPIC) for HSDPA and Effect of 64QAM Data Modulation	NTT DoCoMo	Noted	(*9) Day 2 11:53-12:08
45	24	R1-01-0036	HSDPA System Performance	Ericsson	Noted	(*10) Day 2 12:09-12:27
46	24	R1-01-0050	Performance of AMCS and HARQ for HSDPA in the non-ideal measurement and feedback situations	Wiscom	→ Text Proposal	(*11) Day 2 13:53-14:05
47	24	R1-01-0051	Effect of MCS selection delay on the performance of AMCS and HARQ for HSDPA	Wiscom	→ Text Proposal	(*12) Day 2 14:06-14:17
48	24	R1-01-0025	On the Need of Long-Range Prediction (LRP) of Channel Estimation in HSDPA and Text Proposal	Wiscom	Noted	(*13) Day 2 14:17-14:31
49	24	R1-01-0109	Comments on MIMO complexity text in technical report	Motorola	→Offline	(*14) Day 2 14:41-14:48
50	24	R1-01-0043	Comments/Questions on Throughput Simulations for MIMO	Motorola	Noted	(*15) Day 2 16:07-16:17
51	24	R1-01-0131	Link level results for HSDPA using multiple antennas in correlated channels	Lucent	→ Text Proposal	(*16) Day 2 16:18-16:44
52	24	R1-01-0079	Variable TTI proposal for HSDPA	Lucent	Noted T.P. postponed	(*17) Day 2 16:45-17:02
53	24	R1-01-0081	A ² IR - An Asynchronous and Adaptive HARQ Scheme for HSDPA	Lucent	Noted	(*18) Day 2 17:02-17:30
54	24	R1-01-0082	Throughput Results for Asynchronous and Adaptive Incremental Redundancy (A ² IR) for HSDPA	Lucent	Noted	(*18) Day 2 17:30-18:09
55	24	R1-01-0134	Complexity of Node B for MIMO architectures	Lucent	→ Text Proposal	(*19) Day 2 18:13-18:32
56	24	R1-01-0018	Techniques to Support HSDPA for TDD Mode	Siemens	→ Text Proposal	(*20) Day 2 18:33-18:43
57	24	R1-01-0145	LS on Results of HSDPA Study Item AdHoc	RAN WG2	Noted	(*21) Day 3 13:50-14:06
58	24	R1-01-0128	Text proposal on HARQ complexity to TR25.848, Rev. 1	Nokia	→ TR	(*22) Day 3 14:08-14:14
59	24	R1-01-0129	Updated Text Proposal for AMCS complexity evaluation section of TR25.848	Sony	→ TR	No (*23) Comments Day 3 14:15-14:22
60	24	R1-01-0132	Text proposal on system perf. w/wo FCS (faded but no motion, 0047)	Motorola	→ TR	(*24) Dav 3 14:23-14:34

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
61	24	R1-01-0079	Variable TTI proposal for HSDPA	Lucent	To be revised	(*25) Day 3 14:38-15:09
62	24	R1-01-0007	Considerations on HSDPA HARQ concepts	Nokia	Noted	(*26) Day 3 15:10-15:33
63	24	R1-01-0008	Relationship between frame error rate and TrCH block error rate	Nokia	Noted	(*26) Day 3 15:10-15:33
64	24	R1-01-0005	Text proposal on HARQ for HSDPA TR	Nokia	→ Offline	(*27) Day 3 16:07-16:23
65	24	R1-01-0124	Text Proposal for the TR 25.848	Lucent	Discussion	(*27) Day 3 16:24-16:42
66	24	R1-01-0031	Proposal of bit mapping for type-III HARQ	Panasonic	Noted	(*28) Day 3 16:43-17:00
67	24	R1-01-0048	Clarifications on Dual-Channel Stop-and -Wait HARQ	Motorola	→ Offline Discussion	(*29) Day 3 17:01-17:16
68	24	R1-01-0045	Physical Layer Structure for HSDPA – Text Proposal for Section 6.1	Motorola	→ Offline	(*30) Day 3 17:18-17:20
69	24	R1-01-0116	Text proposal for TR25.848 on physical layer structure	Nortel	Discussion	(*30) Day 3 17:21-17:38
70	24	R1-01-0033	Power Control for Fast Cell Selection in HSDPA	Samsung	Noted	(*31) Day 3 17:38-17:53
71	24	R1-01-0083	Context sensitive modulation and coding sets	Lucent	Noted	(*32) Day 3 17:54-18:31
72	24	R1-01-0074	Use of TPC for DL Channel Quality Estimation	Sony	\rightarrow Further inputs requested	(*33) Day 3 18:32-18:38
73	24	R1-01-0113	Comments on proposed update of TR 25.848 version 0.2.1	Nortel	Noted	No Comments Day 3 18:39-18:43
74	24	R1-01-0168	TR25.848 v0.3.1	Drafting Group	To be revised	(*34) Day 4 14:50-15:31
75	24	R1-01-0140	Complexity of Node B for MIMO architectures	Lucent	Approved with modifications	(*35) Day 4 15:32-15:43
76	25	R1-01-0144	Text Proposals for TR25.848 and TR25.950	Siemens Nokia	Approved \rightarrow TR	No (*36) Comments Day 4 15:44-15:48

(*1) Mr. Jussi Kahtava (Nokia) presented this document.

Nokia had presented the first complexity text proposal (Section 7.1) in the RAN WG1#17 meeting. This is further continuous work on this section. Section 7.1.1.4 *UE and RNS processing time considerations* was newly added. Furthermore some tables were added in the end of section 7.1.1.2 (examples of UE buffer size.)

Ms. Evelyne Le Strat (Nortel) remarked that there is a kind of inconsistency in the paper because in figure 1 "Average receiver L1 buffer size for dual channel SAW HARQ", TTI of 15 slots is assumed as one case but on the other hand there is no case of TTI of 15 slots in the buffer/memory tables neither in the processing time

consideration section. She added that shorter TTI has some benefits but it also have problem with signalling being complicated and therefore in terms of feasibility study at this point TTI 15 slots should be considered.

Mr. Jussi Kahtava agreed with this comments and answered that he would provide the revised text proposal. There were some discussion on the relation between (shorter) TTI and processing time. Chairman remarked that it should be clarified that it is not feasible to have 1 slot TTI from the feasibility study point of view because there is no time for processing at all regardless how many bits there are.

Mr. Erik Dahlman (Ericsson) commented on Figure .1 that this is average receiver L1 buffer size however what is the actual receive buffer size ? \rightarrow the "average" will be removed in the actual TR.

Mr. Erik Dahlman added that there should be conclusion added in this text proposal otherwise the intention of this text would be ambiguous. Chairman agreed with this comment and remarked that this text should have a

conclusion which hopefully states that HARQ is feasible, can be implemented. Chairman also remarked that Section 7.1.1.4 *UE and RNS processing time considerations* had better be put in one level higher section because 7.1 is UE complexity evaluation.

Chairman asked Mr. Jussi Kahtava to provide the revision to the editor of the TR. The revision can be found in **R1-01-0128**.

(*2) Mr. Kasutoshi Itoh (Sony) presented this document.

This paper presented UE complexity issues regarding AMCS for which no text proposal had been made so far. UE complexity with respect to AMCS was analysed in view of performance sensitivity to the estimation errors. Following factors were analysed with the simulation results provided.

- Sampling timing

- CPICH estimation (as the Phase /Amplitude reference)
- Downlink channel quality
- · Ideal AD conversion (no quantizing error) was assumed for the simulation.
- 3.3ms TTI is assumed for simulation.

•"TUI" in figure 5 stands for Transmit Unit Interval(5-slot, 3.33msec) and so the curve entitled "3-TUI average" corresponds to 10ms TTI from the average point of view. → This should be clarified in the actual text proposal. Mr. Erik Dahlman (Ericsson) questioned regarding Figure. 1 Sensitivity to sampling timing error what kind of channel coding has been assumed for release 99 case. He added it would be somehow misleading to put 'TTI=10ms' on the release 99 curve because TTI would not affect on sensitivity to the sampling timing error and therefore rather the channel coding type should be put on the curve instead.

Mr. Katsutoshi Ito agree with this comment and answered 'QPSK + 1/3 turbo coding' had been assumed for all release 99 results.

32 times over sampling was used for the simulation and from those data, the errors were estimated for each corresponding to 4times, 8 times, 16 times over sampling cases. (in figure 1)

- (*3) This document was not actually presented. Proponent stated that they had not incorporated figures presented in R1-01-0059 into this text proposal. Chairman suggested that the figures had better be included in order to be understood well. Chairman invited proponent to provide the revision during this meeting. The revision of this text proposal which includes relevant figures in R1-01-0059 was drafted in R1-01-0129. It was reviewed and approved on Day3. (See No. 59)
- (*4) (Motorola) presented this document.

This is the further study result of comparison of Chase combining and Incremental Redundancy (IR) combining. (There had been 2 contributions regarding this comparison in RAN WG1#17 meeting. Those are **R1-00-1396** [Motorola] and **R1-00-1428** [Ericsson] in which Motorola presented the comparison between Chase combining and Partial Incremental Redundancy combining whereas Ericsson presented the comparison between Chase combining and Full Incremental Redundancy combining and both results rather opposed to each other.) In this contribution, several simulation results were presented and following conclusion were drawn.

- For QPSK, full IR benefits over Chase are not significant in the region of interest.

- For higher order modulation (MCS-6 and MCS-7), the full IR provides more than 1dB gain in Ior/Ioc in a fading channel. However, the gain occurs in a region where a lower MCS may have been selected.
- The decoder and signalling complexity of the full IR scheme over Chase combining needs to be evaluated, and weighed against the likelihood of the MCS selection process degrading to the point where a significant overall throughput gain is seen for the full IR

There were several comments made.

- The curves do not accommodated the fact that 64 QAM is more sensitive to things like estimation errors.
- Is it correct to understand that Full IR is beneficial only for 64QAM ? \rightarrow Yes
- These results agree very much with the ones shown in **R1-00-1428** (Ericsson). The results in R1-00-1428 should be referred in the conclusion in the TR.
- These results assume that MCS level would not be changed in re-transmission. → this is link level simulation.
 → This should be clarified in the assumption in TR. (chairman)
- The conclusion should be reached on the system level simulations because many aspects like feedback delay and asynchronous operation of Chase or IR combining are being ignored here.

Chairman concluded that since it is beneficial to have these curves in the TR from the feasibility study point of view and RAN WG2 was waiting for this kind of results, some of these curves should be included in the TR. But in the TR, he added, it should not cover all the aspects, why Chase or why IR etc. But it should just have the link level simulation results assuming MCS is constant in the re-transmission and just put what can be concluded. He asked Mr. Amitabha Ghosh to provide text proposal for this in **R1-01-0130**.

- /*** Eventually R1-01-0130 was not produced. Text proposal was combined in R1-01-0133 ***/
- (*5) This paper addressed a scheme in which the downlink channel quality is estimated by the transmit power of DPCH instead of having explicit channel quality reports from UE. It was shown with some system level simulation results that this proposed scheme works well and can achieve almost the same throughput as in the case with channel quality report.
 - A couple of comments were made.
 - The error in TPC commands was not considered in the simulation.
 - What is going to happen if the UE velocity becomes higher than 3 km/h? \rightarrow For further study.

Chairman concluded we should note from this contribution that there is also some possibilities in Node B side to use other information besides UE report. When we finalize the scheme for MCS selection, we should keep in mind this kind of possibility as well.

/** coffee break 10:39-11:14 **

(*6) This paper presented simulation results on HSDPA system performance with/without fast cell selection(FCS). It was shown that FCS improves throughput and residual FER for UEs in soft handover regions. It was also shown that overall system benefit due to FCS is more significant with fair schedulers such as Round Robin compared to maximum C/I schedulers. No mobility was assumed in the simulation.

There took place some questions-answers session on the simulation assumptions.

Finally chairman concluded taking into account the fact that there has been no text proposal on this topic that a text proposal based on this paper should be produced including 4 tables and some curves. He added that it should be clearly stated in the TR that there any assumption about delay on protocol sides has not been done so that RAN

WG2 can clearly understand that for their aspects no delay assumption has been made. He suggested a sample statement.

the time for transfer between Node-B's are not included in simulation results.

The text proposal would be produced in R1-01-0132.

(*7) This paper presented simulation results on HSDPA system performance with/without CPICH errors and H-ARQ. It was shown that a drop in packet call throughput is between 5% and 10% with 1 dB CPICH measurement error however the packet call throughput drop approaches 50% when CPICH measurement error becomes 3dB. It was also shown that compared to the case with HARQ there is a significant drop in packet call throughput in the case without HARQ.

It was pointed out that the over the air throughput in Table 5 (CPICH Error $\sigma = 1$ dB) looks better than that in Table 4 (CPICH Error $\sigma = 0$ dB). \rightarrow Motorola had not realized it. But for packet call throughput, Table 4 is better than Table 5. Chairman commented that we should not pay much attention for this, it is small difference. As a conclusion, in order to the show performance degradation related to estimation error, this results should be included in the TR. Text proposal would be produced in **R1-01-0133**.

- (*8) This is the update of **R1-00-1397** which was presented in RAN WG1#17 meeting. Since the results in R1-00-1397 had been implemented in the TR already, those tables corresponding to Table 1 and Table 2 in this paper should be replaced by those in this paper.
- (*9) Mr. Masafumi Usuda (NTT DoCoMo) presented this document.

This paper introduced new technique called Multi-Path Interference Canceller (MPIC) which can mitigate severe multipath interference. It was shown that with this technique it is possible to obtain high throughput using high order modulation such as 64QAM even in the multipath environment. Figure 3 showed drastically improved performance by this technique in 2 path environment.

There were several comments made.

- How much receiver complexity will this technique have ?
 - \rightarrow Not yet analysed but NTT DoCoMo will show the complexity study report in the future meeting.
- Section 2 says that effective spreading factor (not actual spreading factor) becomes nearly 1.
- This is interesting technique and we should definitely evaluate this.
- equal power path was assumed for the 2 path environment in figure 3.
- As for the delay profile in the simulation, NTT DoCoMo will inform it later.
- Chairman concluded that this is something to think about.
- (*10) Mr. Erik Dahlman (Ericsson) presented this document.
 - This paper presented several simulation results including,
 - Scheduler performances
 - Performance gain with higher-order modulation
 - Gain achieved by fast cell selection
 - Impacts of fast fading and time dispersion

and concluded

- There is a significant gain with fast scheduling and fast adaptive modulation/coding.
- The gain with fast cell selection is most notable for Round-Robin scheduling while, with a scheduler that already takes the channel conditions into account in the scheduling, the gain with fast cell selection is smaller.
- Both fast fading and time dispersion has significant negative impact on the HSDPA performance. However, in both cases, the performance can most likely be improved by means of more advanced UE signal processing.

Mr. Erik Dahlman remarked that results here confirmed the results of Motorola and there was no need to put these results in this paper into the TR because these had already been quite well covered Motorola.

/** Lunch break 12:28-13:47 **/

(*11) This document presented the performance evaluation of adaptive modulation and coding schemes (AMCS) and fast HARQ in the non-ideal measurement and feedback situations for HSDPA and compared them with the performance in the ideal case.

It was shown that for the typical value of Ec/Ioc, the channel measurement accuracy has large impact on the throughput. It was also shown that at slow vehicle speed the performance between the ideal and non-ideal case is about 1 to 2 dB for most Ec/Ioc except very low values (less than -15dB). Based on the results it was suggested that at slow vehicle speed, longer time CPICH average might be necessary for more accurate measurement to improve the throughput though at fast vehicle speed, the long time average might fail to track the channel condition closely.

There was small question-answer discussion.

Chairman stated that this is something that needs to be discussed further but it is not necessary to be included in the TR at this point of time. Proponent requested that this should be included in the simulation section. Chairman agreed to this request. The text proposal for this paper shall be provided in **R1-01-0136**.

(*12) This document presented simulation results of the effect of MCS selection delay on the performance of AMCS and HARQ for HSDPA.

It was shown that the performance loss due to the MCS delay is not significant at very slow vehicle speed however it increases at higher vehicle speeds and larger MCS selection delays. It was also shown that the throughput loss due to MCS selection delay is about 1 dB or 22% throughput loss. It was suggested that the technique to predict the channel condition might help to reduce such performance loss.

Chairman remarked that the text proposal of the previous paper (**R1-01-0136**) should contain the results of this paper as well. Chairman stated that it should be clearly mentioned in the text proposal about what is included in

the non-ideal case, which error are included.

(*13) Mr. Robert C. Qiu (Wiscom) presented this document.

This paper proposed to include Long Range Prediction(LRP) for channel estimation in the TR. It has been already shown by several simulation results so far presented that the throughput performance is very sensitive to the channel estimation and thus the accurate channel estimation is essential especially in the case of higher modulation, high coding rate and high mobility. This paper proposed to include such LRP technique in the TR by having separate section for it.

There were several comments made against this proposal of having separate section (separate technology) for this. Main opinion was that LRP could be useful technique but it is just an implementation issue and it is one method of improving the performance of adaptive modulation and coding scheme. It cannot be considered as a fundamental or new technology for HSDPA. It could be mentioned in the adaptive modulation and coding performance section. Chairman supported this major opinion and concluded.

There is no reason to rush with this now. This is not anything essential for RAN WG2 to know. For the next meeting we can probably figure out where and how to reflect this.

Chairman introduced the e-mail distribute by RAN WG2 chairman on the RAN WG1 reflector. < E-mail sent on January 16, 01:06 > (14:33-14:40)

> Dear Antti and RAN WG1 colleagues,

> I am writing a small mail in order to inform you of the progress made today during the first of the 2 days R2 ad-hoc where

> HSDPA is treated. I can expect that this is important for Antti to use the already available results so that he organises the work > in RAN WG1 based on correct assumptions.

> There has been a decision (that will not surprise so many people) of having a new function in the Node B, called MAC hs-

> DSCH, which has the following functions:

> flow control to the RNC

> Hybrid ARQ repetition protocol

> _ scheduling

> TFC selection

> This MAC operates over a number of DSCH, similarly to what we have today in the CRNC for MAC c/sh. This MAC uses > services of Transport Channels (hs-DSCH) according to the existing rel 99.

> It was agreed that the same model should be used also for TDD, although the actual protocol operation (in particular the > associated signalling) may differ for the allocation of DSCH resources.

> RAN WG2 will study the HARQ protocol tomorrow, and in particular study the requirements that it places on the Transport

> Channels provided by the layer 1. Since we only perform a feasibility study, there is no need to close on the detailed protocol > before we start on release 5. Still, we must describe one feasible scheme, and show its performance so that we can report to

> RAN Plenary, with the corresponding proposed Work Items.

> As agreed with Antti, the results of the layer 1 simulations will be input into the RAN WG2 TR so that it can be approved in > RAN Plenary. This means that everything needs to be finished by our next meetings. Then after the plenary (before looks > difficult given time schedule) the proposal would be to have a joint meeting where the RAN WG2 TR can be used to kick off > actual work.

> RAN WG2 intends to send a LS with an update of the R2 TR on HSDPA ASAP so that the work in RAN WG1 can now > progress on stable ground. This should be probably Wednesday morning your time at the latest.

> BR

> RAN WG2 Chairman

(*14) Motorola presented comments on the text in the TR (R1-01-0117) regarding section 7.4.2, MIMO UE complexity evaluation.

Comments were made on

- UE form factor
- RF complexity
- Base band complexity

- Antenna spacing required to achieve required decorrelation

- Multiple antenna reference

Chairman remarked that he thought the comments are more or less relevant. He added a comment on the base band complexity that in case some values are used, regardless the units it should be clarified what are the assumptions behind the value so that everybody can repeat similar calculation. Some information on the assumptions is definitely needed.

Chairman suggested offline discussion among interested parties for the necessary clarifications or additions to the text. R1-01-0138 was allocated for the possible revision for MIMO UE complexity evaluation section. (*15) Mr. Amitabha Ghosh (Motorola) presented this document.

Comments and questions on R1-00-1387 titled "Throughput Simulations for MIMO and Transmit Diversity Enhancements to HSDPA" were presented.

> Denis Fauconnier

Lucent answered briefly on each items on line. Concerning closed loop diversity, it was mentioned that closed loop diversity is not appropriate reference to be used. They will provide some results for this. Furthermore there are going to be further simulation results and some updates on the simulation assumption. Detailed discussion will be made offline.

(*16) This document presented simulation results on MIMO performance in highly correlated channels. In the last meeting it was questioned by Siemens what would happen to the MIMO performance in highly correlated channels. Lucent provided this paper as the answer to the question raised by Siemens and they did not have any intention to put this study into the TR. It was mentioned that the channel used here is unrealistic and we do not expect this kind of channel in practice. It was shown that the MIMO has a very robust performance even in highly correlated channels.

There were a lot of comments/questions were raised.

Finally chairman remarked that it would be good to have these results in the TR unless somebody has problem with this because the sensitivity to the correlated channel is interesting and one important area. With respect to this chairman's proposal, Siemens requested to postpone the decision until next meeting so that

- they can have offline checking. Chairman agreed to this request.
- (*17) This paper introduced the notion of using a variable length TTI for the HS-DSCH which had been originally presented in R1-00-1381 in RAN WG1#17. In this paper the benefits of variable length TTI were shown along with some simulation results. The variable TTI concept allows using larger code block sizes even for lower data rates in order to get maximum Turbo coding gains. For higher data rates, the transmission time is kept to minimum to fully exploit the scheduling gains, while still achieving high Turbo interleaving gains. This paper also contains the text proposal on variable length TTI for the TR.

Chairman remarked as follows.

We should not enter discussion on the text proposal for this section 6 before we get the updated technical report from RAN WG2. Our intention is that we should cover something for the simulation results and complexity issue first. In order to have this kind of detailed discussion on whether we should vary TTI or not we need to see what kind of principles RAN WG2 is laying out there even though the fact that for the larger block size we can get better turbo coding gain would not be controversial issue.

Lucent proposed to present R1-01-0081 before they get comments because R1-01-0079 and R1-01-0081 are closely related. R1-01-0081 has algorithm, detailed scheme for which they are going to give simulation results in R1-01-0082 and R1-01-0081 itself is not directly related to TR

Chairman accepted this proposal but added that we would only see what has been simulated and what is to be demonstrated by those results. We would not treat text proposals or what is supposed to be reflected in the concept at this point of time. As for the text proposal, we would come back later after we received RAN WG2 updated technical report.

- (*18) This is power point presentation. The complete description of this scheme is given in R1-01-0080. (Word file) This paper presented details of Asynchronous and Adaptive Incremental Redundancy (A²IR) proposal for HSDPA which had been proposed in R1-00-1382 in RAN WG1#17. R1-01-0082 contains simulation results on this scheme and reviewed in succession right after the presentation of R1-01-0081.
 - There were quite a lot of questions and comments were made with respect to R1-01-0079, 81 and 82.
 - What is idea of Aggressive approach on the scheduling ?
 - Simulation results presented are the link level simulation (no traffic model involved). We definitely need to have system level simulation to see what actually the benefit is.
 - Throughput comparison for synchronous/asynchronous should be modified. Stop-and-Wait scheme is wrongly treated.
 - We have to take into account of the complexity.
 - Comparison of variable TTI and variable code allocation is needed.
 - What is the frame in frame error rate in R1-01-0079? \rightarrow equal to block size
 - How should we read the table 1 in R1-01-0079?
 - How much is the aggressive method related to IR ? Can we use Chase combing with the aggressive method?
 - \rightarrow Chase combing can be used with aggressive method though the simulation results (gain) would be different because MCS level is changed in the re-transmission in IR.

- etc.

For every question, Lucent made answer.

Chairman remarked that we need to have system level simulation for the average throughput before we made a conclusion

/** Lucent explained for information that R1-01-0084 contains Lucent's response to a document (R1-00-HARO-Issues) which had been distributed on the e-mail reflector by Ericsson. **/

- (*19) This contribution addressed the complexity at the Node B for MIMO architectures over those requirements for conventional HSDPA transmission with a single antenna. The additional baseband processing required for MIMO transmission and the antenna separation requirements for sufficient channel decorrelation were analysed. Several comments were made.
 - The number of power amplifiers (for each antenna) should be mentioned.
 - Does MIMO have same requirement as Tx-diversity in terms of exact timing sensitivity ? \rightarrow could be addressed.
 - The assumption not only this document but in general concerning MIMO looks as if there were only one single transport channel with fix bit rate allocated to one user. What is gong to be the impact on Node B when we have to switch configurations with/without MIMO ? In Node B we also have other channels than HSDPA at the same time which may not use MIMO and then we will end up with PA having different powers for transmitting those

conventional channels and other transmitting the MIMO operating channels. We should try to reflect this kind of things in the complexity analysis. \rightarrow Lucent proposed offline discussion concerning this comment.

- Is MIMO only applicable to HS-DSCH?
- → Analysis have shown that in case where you have multiple users with lower bit rate environment MIMO is not the best solution. Tx-diversity and Rx-diversity technique would achieve compatible gain as MIMO in such environment. Lucent will probably provide the document addressing this issue in the next meeting.
- In MIMO system if we need channel estimation at each antenna element then complexity will increase n times than single antenna cas ? → It is true that MIMO needs channel estimation at each antenna element but this should be mentioned in MIMO UE complexity.

Chairman concluded that this document should be converted into the text proposal reflecting the comments received. **R1-01-0140** was allocated for this text proposal.

- (*20) This document presented applicability consideration of those HSDPA techniques proposed in FDD mode to TDD mode. In conclusion this paper stated that in general the proposed techniques are applicable for the TDD mode as well. It was proposed that HSDPA techniques for TDD mode be considered for release 5 and harmonization of TDD and FDD was desired in order to optimise the system for both modes. Chairman suggested that we should have some section that include TDD specific consideration in the TR. There is no need to duplicate the common stuffs. R1-01-0141 was allocated for the text proposal on this issue. But later this number was cancelled and new number R1-01-0144 was reallocated for this text proposal. (See No. 76)
- (*21) This is a LS from RAN WG2 HSDPA Study/Item Ad Hoc (R2-010205) sent to RAN WG1 and RAN WG4. This was received on Day3 morning. TR (TR 25.950 *UTRA High Speed Downlink Packet Access* v0.1.0) was attached. Chairman presented the LS on the screen.

Besides the attached TR they also were asking 5 questions on HSDPA. As for the TR attached, a lot of sections were left blank to be filled by RAN WG1.

RAN WG2 was not clearly saying anything about RAN WG1 TR what they expect. Probably they expect those simulations and assumptions and in most cases they would just try to use them putting references to our TR in their TR.

Mr. Said Tatesh (Lucent) remarked regarding the questions raised by RAN WG2 that Lucent was happy to volunteer in providing draft answers.

Chairman answered before having a draft provided by one company we have to make a discussion on what kind of answers we should make. \rightarrow Discussion will be made in the night session.

(*22) Mr. Jussi Kahtava (Nokia) presented this document.

This is the text proposal on HARQ complexity. This is the revision of R1-01-0006 which was reviewed on Day2 (See No. 36) Comments received were reflected in this revision.

Mr. Erik Dahlman (Ericsson) remarked that it should be mentioned somewhere in the text that there is a difference in complexity between different HARQ schemes (Chase combining vs. IR) though these differences do not justify that any scheme is discarded at this stage.

Chairman agreed with this comment and suggested this should be mentioned in the conclusion.

Mr. Amitabha Ghosh (Motorola) questioned whether we should include something regarding memory access time for Turbo codes ? \rightarrow It should be considered a little bit later stage. (Chairman)

Conclusion : This text proposal was approved with one addition to conclusion about complexity issue mentioned above.

(*23) Mr. Kasutoshi Itoh (Sony) presented this document.

This is the revision of **R1-01-0060** which was reviewed on Day2 (actually it was R1-01-0059 that was reviewed.). (See No. 37, No. 38)

Some of the curves in R1-01-0059 were incorporated into the text proposal as was requested by chairman.

(*24) Mr. Amitabha Ghosh (Motorola) presented this document.

This is the revision of R1-01-0046a which was reviewed on Day 2 (See No. 41)

Chairman remarked that it should be mentioned that *the possible delay due to the time for transfer between Node-B's are not included in simulation results* as it had been discussed in the Day2 discussion. \rightarrow Mr. Amitabha Ghosh agreed.

(*25) This document had already been reviewed on Day3 (See No. 52) But the text proposal part had been postponed until we received the LS from RAN WG2. Now that the LS was received and thus it was proposed to review the text proposal.

There took place a bit long discussion.

The main opinion was that the text proposal provided in this paper is not balanced, neutral because only benefits of variable TTI scheme were listed and no disadvantages, difficulties were mentioned. Furthermore there were several opinion that the background assumptions on which the benefits stands were not necessary valid. Several examples were given to show that it is not necessary valid assumptions. Lucent side also explained their background and validity of the assumptions and benefits. There were also opinions that this kind of scheme should definitely included in the TR as an option to be investigated though the current proposal text itself is not balanced and therefore needs to be modified.

Finally chairman concluded as follows.

My personal view is that we should definitely cover this scheme of variable TTI in the technical report. But I sense that people feels that the text proposal what is put in this paper is not neutral. We need to have a bit more neutral and generic text proposal on this topic. So this should be revised.

R1-01-0149 was allocated for the revision. Lucent expressed their welcome for any contribution on this topic. (*26) Mr. Jussi Kahtava (Nokia) presented these documents. (R1-01-0007, R1-01-0008)

This paper discussed a couple of concepts on HSDPA.

R1-01-0008 was reviewed in conjunction with R1-01-0007.

There was one remark for more specific explanation why variable TTI will complicate the scheduling.

It was answered the scheduling would be complicated from the comparison point of view with release 99 specs. Questioner was not satisfied with this answer. \rightarrow Chairman suggested offline discussion.

Mr. Amitabha Ghosh (Motorola) made a comment on the simulation results in R1-01-0007 that Motorola also had performed similar kind of simulation with release 99 system and had arrived same conclusion.

Chairman remarked that since RAN WG2 is expecting this kind of results as well, we could consider this result should be included in the TR somehow.

(conclusion of R1-01-0007 : It seems sensible to do the HARQ ack/nacks and retransmissions at the frame level (TTI level), and not separately for each TrCH block.)

/** Coffee Break 15:34-16:04 **/ (*27) Mr. Jussi Kahtava (Nokia) presented R1-01-0005.

This is the continuation work of R1-00-1369 which was discussed in RAN WG1#17.

Text proposal on HARQ was presented. Not solution but what kind of things has to be considered when we further investigate actual scheme for HSDPA was explained.

Since Lucent had provided the text proposal on the same section as this paper, chairman proposed to have a look at Lucent paper (**R1-01-0124**) in succession.

Lucent presented R1-01-0124.

In this paper, in addition to Nokia's proposal, following text proposals are included.

- Fully asynchronous operation
- Adaptive HARQ operation in which MCS can be changed in re-transmissions
- FCS operation
- There were some discussion took place.
 - We should avoid duplication of the description with RAN WG2 TR. We should only focus on layer1 issue. For instance, regarding synchronous / asynchronous operation, 2 signalling possibilities have already been documented in RAN WG2 TR. From RAN WG1 point of view we should clarify what is effectively simulated. What has been simulated ? What do we need to explain in addition to RAN WG TR ?
 - Ideally if RAN WG2 description is in that detail we could just refer to that and cover the topic. But probably we need to have some picture in RAN WG1 TR as well because some of the RAN WG2 picture are not necessary the best ones we can have. (Chairman)
 - We should try to have neutral description in the TR. Let's not draw any recommendations or conclusions for the topics we have not reached consensus. (Chairman)

Chairman suggest offline discussion to make one proposal. If we can refer to RAN WG2 TR, then we should avoid repetition. Overview section had better be brief. **R1-01-0150** was allocated for the revised text proposal.

(*28) This document presented new scheme on bit-mapping for type-III HARQ. In this scheme sender transmits systematic bits and parity bits on separated symbols and then receiver combines retransmitted packets' symbol before calculating the log-likelihood ration. Simulation results were also presented.

It was shown that proposed new scheme can achieve better performance than conventional type-III HARQ and requires less size of receiver buffer compared to that of conventional one.

It was pointed out related to figure 5 that in case of QPSK case there is no difference between so-called symbol combining and conventional combining in the computation of log-likelihood ratio. We should be more specific about how the difference is in figure 5.

Panasonic agreed with this comment and stated that they would examine the results of QPSK case again. Chairman stated that this could be one alternative of implementing IR and be incorporated in the TR at some point of time if everybody thinks OK. Some clarification should be done on the e-mail reflector before the next meeting. Then in the next meeting we can approve the text proposal on this topic for the TR. This kind of transmitter / receiver structures on the complexity issue could be included to current complexity section. From the memory size viewpoint this kind of proposal is very important. The channel interleaver operation should be elaborated more using one explanatory picture.

(*29) Mr. Amitabha Ghosh (Motorola) presented this document.

This document proposed to clarify the purpose, possible configurations, and signalling requirements of Dual-Channel Stop-and-Wait Hybrid ARQ (DC-SW-HARQ). Since similar paper had already reviewed (R1-01-0005, Nokia, See No. 64) Mr. Amitabha Ghosh presented this briefly.

Chairman remarked that this text proposal seemed to have been submitted to RAN WG2 as well because more or less same text was included in RAN WG2 TR and so in our TR, we could just put references to RAN WG2 report. (There was one comment that although this text was adopted in RAN WG2 TR it is no way aligned with RAN WG2 usual terminology.)

Mr. Amitabha Ghosh will join the drafting of R1-01-0150. (See No. 64)

(*30) Both of these 2 documents (R1-01-0045 and R1-01-0116) contained the text proposal for the same section (6.1). Chairman proposed to review both documents together.

Mr. Amitabha Ghosh (Motorola) presented R1-01-0045 and Ms. Sarah Boumendil (Nortel) presented R1-01-0116. There was a bit long discussion regarding the treatment of 3rd bullet and 4th bullet in section 6.1.3 in R1-01-0116. There was a comment that 3rd and 4th bullet points are RAN WG2 issues and it does not agree with RAN WG2 TR. Ms. Evelyne Le Strat (Nortel) explained the background why Nortel drafted this text proposal. She added that they can agree not to include their text proposal however then they cannot agree to Motorola's text proposal because it explicitly states fixed spreading factor which is not in line with RAN WG2 TR. Chairman suggested offline discussion. The revised text proposal on this section will be made in R1-01-0152.

(*31) The paper discussed the impact of FCS on power control and presented possible power control strategies for the dedicated channels associated with HSDPA.

There was one concern raised on this proposed strategy for the uplink.

Chairman stated that this proposal was noted at this point of time since this issue is not critical at this stage from the feasibility study point of view. Later after the feasibility study this may be revisited when we discuss power control issue for FCS if necessary.

Mr. Erik Dahlman (Ericsson) remarked that it is important to consider this issue of power control for FCS in the feasibility study phase, however when it comes to solution, it should be done in later phase. Furthermore he added he is sceptical with this solution.

(*32) It was proposed in this paper that the transport block is not necessary always tied to the code space and therefore in case of HARQ we could have variations in the code space however transport block size has been fixed, we will have to change the code rate.

It was pointed out that the proposal is actually the relationship between different transport formats. We will have to consider the fact that we have limited signalling capability for the definition of transport formats to be used by certain UE. How the UE should derive the transport formats from broadcasted code availability. This is out of RAN WG1 scope.

It was also pointed out that the terminology should be aligned as much as possible with what is used in RAN WG1 and RAN WG2.

Chairman agreed with above comments and concluded if we want to introduce this kind of schemes then we should introduce it in RAN WG2 for the first place and there make them aware what the proposal really is. It is difficult to initiate the discussion from RAN WG1 perspective because this does have impact eventually on RRC signalling and broadcast channel contents.

(*33) Mr. Kasutoshi Itoh (Sony) presented this document.

This is the extensional work of **R1-00-1378** which was reviewed in RAN WG1 #17 in which it had been proposed to use TPC commands in order to adjust the reported DL channel quality and to recover the throughput lost by the delay of feed back. In this new paper an extended method was proposed in which TPC commands are used to reduce the required reporting frequency for DL channel quality. It was mentioned in the presentation that this method would require an additional signalling message to indicate reporting frequency. Sony will provide the performance evaluation results in the next meeting in case the proposed method is considered to be feasible. Chairman stated that we would wait for further inputs on the performance evaluations in the upcoming meetings.

(*34) Mr. Amitabha Ghosh (Motorola, editor of the TR) present this revised TR.

This is the output of the drafting session which took place on Day3 night.

Chairman gathered comments on section-by-section basis.

Section 5.4 : "Third" \rightarrow "Furthermore"

Section 6.1.1 : "The argument for this alternative is lower UE complexity." should be removed at this point of time. This issue would be revisited in the next meeting.

Section 6.1.2 : Square brackets should be removed. Sentence in the square bracket should be kept.

Revision will be made in **R1-01-0177**.

(*35) This is the revision of **R1-01-0134** which was reviewed on Day 3 (See No.55). This was reviewed right after the TR reviewal because in the TR the text concerning MIMO Node B complexity had still been blank. Intention was to review this text proposal here and to put it in the section 7.4.3 in the TR before we sent TR to RAN WG2 if the text proposal was agreeable.

Mr. Amitabha Ghosh (Motorola) was opposed to having concrete numbers in this text. He insisted that text should be general.

Finally with removal of the concrete numbers and with some modification on the text, this text proposal was approved.

Chairman suggested that form now on TR needs to be self-containable and no references to RAN WG1 documents (R1-**-***) nor references to public documents should be put in.

Lucent remarked that they would provide the document [3] (IEEE document) on the e-mail reflector.

(*36) This is the text proposal regarding inclusion of TDD to the TR. This was based on the discussion of **R1-01-0018** which was reviewed on Day 3. (See No. 56) This document also contained a very short text proposal for RAN WG2 TR just putting the reference to RAN WG1 TR so that RAN WG2 can simply refer to RAN WG1 TR in their section concerning TDD mode.

Chairman concluded that the text proposal for RAN WG2 TR would be sent together with RAN WG1 TR in the LS to RAN WG2. RAN WG2 will decide what they should do with the text proposal.

/*** Day 4 coffee break 15:53 -16:05 ***/

/*** Day3 plenary meeting ended at 18:55 ***/

7.1.3 TR 25.848 Drafting session Day3 20:00 - 24:00?

7.2 TDD Node B Synchronizations (Ad Hoc 30)

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
74	XXX	-	25.223	R1-01-0003	Working CR on Node B sync over air interface in UTRA TDD R'4 – Description of the cell synchronisation codes	В	Mitsubishi	Approved in principle	No (*1) Comments _{Day2 15:06-15:10}
75	042	-	25.221	R1-01-0068	Introduction of the cell sync burst	В	Siemens	Approved in principle	(*2) Day2 15:10-15:14
76	044	-	25.224	R1-01-0002	Layer 1 procedure for Node B synchronisation	В	Siemens	To be revised	(*3) Day2 15:15-15:24
77	022	-	25.225	R1-01-0013	Measurements for Node B synchronisation	В	Siemens	Approved in principle	(*4) Dayl 15:24-15:27

(*1) Mr. Marian Rudolf (Mitsubishi) presented this CR.

This CR is based on the contribution which was discussed and agreed in principle in the TDD Ad Hoc session in RAN WG1#17 meeting. (**R1-01-1351**). This CR had been sent on the e-mail reflector one week prior to this meeting. This was agreed in principle. After getting CR number for release 4, this will be approved in the next meeting.

(*2) Mr. Stefan Oestreich (Siemens) presented this CR.

This CR proposed to insert a note indicating that there might be other transmission than RACH on the PRACH. Note reads,

In case of Node B synchronisation the PRACH may be used for the transmission of a cell sync burst [8] based on a higher layer schedule. The cell sync burst shall be transmitted at the beginning of a timeslot. In this case the transmission of a RACH may be prohibited on higher layer command.

Ms. Evelyne Le Strat (Nortel) questioned regarding this whether it is clear in RAN WG2 specification that this is allowed or whether there is any model in RAN WG2 showing this.

Mr. Stefan Oestreich answered that Siemens has an accompanying CR in RAN WG2 for this procedure but maybe they do not know that cell sync burst will be transmitted because this is something in physical layer. It should be checked whether this CR will have an impact on TS 25.302 or not.

Chairman concluded that the final approval decision will be made in the next meeting.

(*3) Mr. Stefan Oestreich (Siemens) presented this CR.

Main part of this CR (creation of new section 4.9 Node B synchronisation procedure) is coming from the technical report.

Mr. Stephen Dick (InterDigital) requested offline discussion on higher layer functionalities.

Chairman remarked that it would be better to have reference to the corresponding RAN WG3 specifications. He also made a comment that it might be better to mention in the some of the specifications that this is not only one method for synchronization. It is not necessary that all the Node Bs implement exactly this kind of method. There was one editorial comment that the description should be in line in the specification.

Chairman concluded that the final approval decision will be made in the next meeting.

(*4) Mr. Stefan Oestreich (Siemens) presented this CR.

Two new UTRAN measurements for Node B synchronization were introduced, they are *Cell Sync Burst Timing* and *Cell Sync Burst SIR*.

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
78	27	R1-01-0125	TFCI power control in split mode	LGE	Not release 4	(*1) Day2 18:45-18:58
79	27	R1-01-0063	Text proposal for TR 25.841 : Improvement of Power control for DSCH in soft handover	LGE	Next meeting	(*2)

7.3 DSCH power control in Soft handover

(*1) The concept of this proposal had been presented in RAN WG1#17 meeting in **R1-00-1429**. Chairman had also mentioned this in his report to RAN. This document was continuous work on that and comparison of proposed method and release 99 method was presented. It was requested that this method be included in the TR. Mr. Jussi Kahtava (Nokia) asked for quantitative analysis on how much gain and improvement of power consumption will be achieved by this method. → concrete estimation was not provided at least in the meeting. Chairman asked people whether we should treat this for release 4 but no support except proponents was made. Based on this chairman concluded that we should teat this issue as a possible proposal for release 5.

(*2) This document was not presented.

LGE explained that this is the text proposal on the topic described in **R1-01-0125**. Since now the TR is placed under change control, CR procedure is needed for a change. Chairman stated that if you prepare the CR (for rel. 5) then it would be better placed under the section of "beyond release 99".

-						
No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
80	22	R1-01-0032	Revision of TR25.840 Terminal Power Saving Features (v2.0.0)	Samsung	Approved	No (*1) Comment _{Day3} 09:21-09:26
81	22	R1-01-0039	Impact of compressed mode on the performance of DPCCH gating	Ericsson	LS will	(*2)
82	22	R1-01-0114	Interactions between DPCCH gating and monitoring for handover purposes	Nortel	be produced	(*2) Day3 09:27-10:08
83	22	R1-01-0009	Further clarifications on outer loop power control during DPCCH gating	Nokia	Agreed	(*3) Day3 10:09-10:14
84	22	R1-01-0011	Revision of TR25.840 Terminal Power Saving Features including changes to facilitate OL PC to be based on CRC during DPCCH gating	Nokia	To be revised	(*4) _{Day3 10:14-10:26}
85	22	R1-01-0038	Comments on TR 25.840 Terminal Power Saving features	Ericsson	Diamagad	(*5) Day3 10:27-10:44
86	22	R1-01-0142	Answers to Comments on TR 25.840 "Terminal Power Saving Features"	Samsung Nokia	Discussed	(*6) Day3 11:25-12:04
87	22	R1-01-0164	Revision of TR25.840 Terminal Power Saving Features including changes to facilitate OL PC during gating and clarifications based on the comments made during R1 #18	Samsung Nokia	To be revised	(*7) Day4 16:32-16:44

7.4 Terminal power saving features (Ad Hoc 22)

(*1) This is the revision of **R1-00-1444** (v1.2.0). After WG1 #17 meeting, there were some e-mail discussions on the following 2 issues.

- Interaction of gating with compressed mode

- Assumptions under which UE battery life enhancement calculation was performed

This revision includes some clarifications on above discussions and some minor editorial corrections.

According to the decision in RAN WG1#17 meeting on the description of impacts to RAN WG3, RAN WG3 TR 25.938 "Terminal Power Saving Features (Iur/Iub aspects)" is referenced.

(*2) Mr. Dirk Gerstenberger (Ericsson) presented R1-01-0039 and Ms. Sarah Boumendil (Nortel) presented R1-01-0114. Both of these documents discussed the impact of compressed mode on the achievable gains of DPCCH gating. Since DPCCH gating is terminated during the compressed mode, these 2 documents concluded that the achievable gains by DPCCH gating are very dependent on the use of compressed mode (total time for which compressed mode is active) and thus the claimed battery savings are not likely to be met. There was a bit long discussion took place.

- We need to consider the possibility of gating mode being automatically disabled by layer 1 during the compressed mode so that we can still get benefits of gating mode. There is always significant number of frames without transmission gap. (Mr. Matthew Baker (Philips))
- Some realistic value would be used for amount of compressed mode due to the fact that the compressed mode deteriorate the system capacity. It should be minimized. (Mr. Markku Tarkiainen (Nokia))
- Who can say that compressed mode is going to be used for 90% of the time or going to be used 10% of the time? Probably RAN WG4 is the best place to give some feed back on this kind of issue because it depends on the deployment scenarios, etc. Some kind of LS to RAN WG4 would probably be good for their next meeting then we can get feed back in Las Vegas. (Chairman)
- We are mixing 2 different things which are the percentage of time when the compressed mode is active and the percentage of compressed frames. You can activate compressed mode patter indefinitely, this is allowed by RRC signalling. It does not mean that every frame is going to be compressed and the way the compressed mode is activated as was described in Ericsson's paper is an operators' choice. If operators decide to use infinite duration for compressed mode pattern sequence without compressing every frame it will completely forbid the use of DPCCH gating. (Ms. Sarah Boumendil (Nortel))
- Time duration of an active transmission gap pattern sequence is not immediately related to the amount of compressed mode in terms of compressed frames. If we had a discussion saying that we should not use that long or maybe RAN WG4 should say some recommendation of the certain use of RRC parameters then we are actually limiting the operators freedom to use the compressed mode in the most optimum way. We are limiting parameterisation of compressed mode if we ruled out some of the possibilities. In what sense RAN WG4 will be able to do work on that ?

The time when the compressed mode or transmission gap pattern sequences is active is not immediately related to performance. (Mr. Dirk Gerstenberger (Ericsson))

- Operators will not be restricted. They will set parameters as they wish. If they set compressed mode infinitive then it will just mean gating is disabled. This will not restrict the operators. Even in GSM, terminal battery life is strongly depending on the network setting and this is not putting any restrictions to the operators.

(Chairman)

Conclusion : We would send LS to RAN WG4 indicating that we want to receive some guidance on this aspect of the use of the compressed mode. Then we will derive the conclusion on what can be achieved for release 4 in Las Vegas. The LS should also sent to RAN WG2 and RAN WG3 as CC so that they also can have an answer from RAN WG4.

Chairman asked Ms. Sarah Boumendil and Mr. Markku Tarkiainen to draft the LS in **R1-01-0143**. This LS was reviewed on Day 4 and approved in **R1-01-0173** (See No.112).

(*3) Mr. Markku Tarkiainen (Nokia) presented this document.

This is a revision of R1-00-1460 which was reviewed in RAN WG1#17 meeting.

It was proposed that outer loop power control based on CRC attached to zero transport block will be used also during DPCCH gating because DPCCH BER will not offer good enough performance for outer loop. This method means that DPCCH gating concept will correspond to DPCCH + DPDCH gating. Regarding the impact of this method on the potential DPCCH gating gains in battery saving, it was concluded this method does not have any deterioration.

Mr. Dirk Gerstenberger (Ericsson) remarked though it sounds strange in some way that we have to start transmitting on DPDCH in order to keep the outer loop power control alive when we consider why DPCCH gating was introduced, it seems to be sensible to use the CRC on zero transport blocks.

(*4) Mr. Markku Tarkiainen (Nokia) presented this document.

This is the revision of the TR 25.840 which included the outer loop control during DPCCH gating discussed in R1-01-0009.

- Several comments for corrections were made.
 - "zero transport channel blocks" should be replaced by "zero length (or bit) transport blocks"
 - "DPCCH and DPDCH fields", "field" is not necessary.
 - In section 6.1, "DPDCH field is sent in the same slot ... " gives an impression that the transport format corresponding to zero length transport block is already there but this is not necessary the case.
- These comments shall be reflected to the next revision.
- (*5) Mr. Dirk Gerstenberger (Ericsson) presented this document.

This is the commenting paper on TR 25.840 Terminal Power Saving Features v2.0.0.

Detailed comments were provided in this paper on the following topics.

- Gated DPCCH transmission scheme in FDD Terminology
- Detection of DPDCH frame during gating
- Power control parameters
- Operation with other features
- Impact to WGs
- Reference and history sections
- Performance

Since there had been prepared an answer paper for this commenting paper (**R1-01-0142**) by Samsung and Nokia, chairman proposed to have it presented at first and then to start discussions afterwards.

(*6) This was the answer paper for the commenting paper (R1-01-0038).

For each comment raised in R1-01-0038, answer was provided.

After this presentation, several discussions were made between Mr. Dirk Gerstenberger (Ericsson) and Samsung and chairman.

- "non-DPDCH period" is not necessary appropriate \rightarrow Regarding terminology issue, chairman suggested
 - offline discussion.
- Detection of DPDCH frame during gating
- Mr. Dirk Gerstenberger remarked that if the transmission of TFCI in uplink is really useless, it is a waste of uplink capacity and some method like the one used in the downlink should be considered. Samsung answered there is a room for modifying the method in uplink. They said that the current method has just been chosen for simplicity.
- Now that the outer loop power control is to be included in the TR, issues on recovery period and power control step size need to be reviewed again.
- With respect to SSDT, second bullet point could be more elaborated in terms of the relation with gating.
- Issues related to compressed mode should be treated after we received feed back from RAN WG4.
- Regarding UE battery life enhancement it should be mentioned in the TR that there some dependencies on the implementation.

Mr. Lee Hyeonwoo (Samsung) made a comment on the transmission of TFCI in the uplink in gating at the end of discussion that the reason we transmit the TFCI even in gating mode is to avoid unnecessary switching in gating. He stated that if we do not transmit TFCI in gating mode then the switching rate of UE would be doubled and so that is not recommended. He added Samsung believes transmission of TFCI in uplink in gating is preferred solution.

Against this remark, Mr. Dirk Gerstenberger proposed offline checking.

(*7) This is the revision of the TR (R1-01-0032). Discussion which had taken place in this meeting was included. There were a couple of comments made to the section 8.1.2.2.3 *Impact of Compressed Mode on Battery Life Enhancement* and the revised part in conclusion section (8.1.2.3) that they did not reflect the discussion well. Chairman concluded that section 8.1.2.2.3 and revised part in section 8.1.2.3 should be removed. TR should be revised with above correction and be v2.1.0. The revision can be found in R1-01-0179.

7.5 Positioning (Ad Hoc 29)

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
88	29	R1-01-0118	Simulation results on TDD LCS	Siemens	Noted	No (*1) Comments Day3 12:05-12:09
89	29	R1-01-0014	Clarifications about TDD-LCS and IPDL scheme proposal	Siemens	Postponed LS to be sent	(*2) Day3 12:09-12:22
90	29	R1-01-0064	RTD measurement in UTRAN	Nokia	LS will be sent.	(*3) Day3 12:23-12:34

(*1) This document presented further simulation results on the location services for TDD mode. It was shown that a sufficient accuracy is achieved with an average of 3 measurements and the proposed IPDL scheme for TDD provides enough accuracy and coverage for LCS.

(*2) Mr. Siegfried Bär (Siemens) presented this document.

In RAN WG2#17 it was proposed to introduce an IPDL like enhancement to the OTDOA method for TDD. RAN WG2 had asked us to study its feasibility and evaluate performance improvements achieved by IPDL in **R1-00-1415** (R2-002466). In relation to this request, **R1-00-1355** *LCS for 3.84 Mcps TDD* was reviewed in RAN WG1#17 meeting. R1-00-1355 showed that IPDLs are necessary to provide sufficient accuracy and coverage for LCS however it also received several comments/questions on the simulation assumptions.

This paper (**R1-01-0014**) addressed those comments/questions and provided an updated scheme for IPDLs. This paper also recommended to include the proposed IPDL scheme for TDD in TR 25.847 and to send LS to RAN WG2.

Mr. Stephen Dick (InterDigital) remarked that offline checking (further study) is needed to evaluate the impact on power control performance in case the beacon channels are switched off. (impacts should be clarified.) There were some concerns raised.

- What is the impact on the cell search ? (This should not be forgotten.)

- Backward compatibility for release 99 UEs.

Chairman suggested offline discussion with the interested parties over the lunch and those raised concerns should be reflected in the LS.

LS shall be drafted in **R1-01-0148**. This was reviewed on Day4 and approved in **R1-01-0174**. (See No. 113) (*3) Mr. Jussi Kahtava (Nokia) presented this document.

This document proposed new UTRAN measurement for the support of OTDOA measurements in UTRAN Rel.-4 UE positioning. In TS 25.305 *Stage 2 Functional Specification of UE Positioning in UTRAN*, v3.4.0, the need for the relative time difference (RTD) measurement is described. In order to support this RTD measurement, it was proposed to include SFN-SFN observed time difference for UTRAN.

This document also contained a draft LS to other WGs to get feedbacks on this issue from them.

Mr. Dirk Gerstenberger (Ericsson) questioned where this measurement is supposed to be performed. Node B or RNC ? . \rightarrow It maybe in Node Bs. (chairman)

There were 2 comments on the attached draft LS raised by Mr. Dirk Gerstenberger.

- "STD" in the 3rd line should be "RTD" and the sentence below the definition box should be reworded.

- A question should be put regarding where this measurement is thought to take place (Node B or RNC) ?

There was no other comment and the attached draft LS was approved with correction mentioned above.

R1-01-0147 was allocated for the approved version of the LS. (See No. 106) /**** Lunch break 12:34-13:48 ***/

TS 25 221.

7.6 TDD 1.28 Mchips functionality (Ad Hoc 21) 7.6.1 Physical Ad Hoc session took place Day 3 20:00 - 00:50

7.6.2 Report from Ad Hoc #21: 1.28 Mcps TDD (R1-01-0151) / Source : Ad Hoc 21 chairman

(Day4 13:46-14:00)

Mr. Marcus Purat (Siemens, Ad Hoc 21 chairman) presented this document. Ad Hoc 21 recommended to update the working CRs with the following contributions including the comments made during the discussion.

15 23.221.		
R1-01-0120	Beamforming for 1.28 Mcps TDD	CATT/CWTS
R1-01-0121	Time Slot Formats for 1.28 Mcps TDD	CATTT/CWTS
R1-01-0099	Changes to the physical random access channel (PRACH) for 1.28 Mcps TDD	Siemens
R1-01-0096	Coding of SS commands in 1.28 Mcps TDD	Siemens
TS25.222:		
R1-01-0092	Coding of FPACH	Siemens
TS25.223:		
R1-01-0126	Modulation of the SYNC-DL	Siemens
TS25.224:		

R1-01-0119 DTX of radio frames for 1.28 Mcps TDD R1-01-0122 Transmit power control for 1.28Mcps option



The updated working CRs will be posted to the RAN1-reflector immediately after the WG1#18 meeting. Comments shall be provided before the WG1#19 meeting.

For following 3 documents, revisions shall be presented in the plenary for approval. R1-01-0091, "Description of the FPACH", Siemens → R1-01-0158 (See No.94), R1-01-0159 (See No.93) R1-01-0075, "Correction of the Mapping of TFCI Code Word for very short TFCI for 8PSK", Samsung → R1-01-0157 (See No. 95)

R1-01-0094, "Transmission of TPC commands in 1.28 Mcps TDD", Siemens → R1-01-0160 (See No.92)

For following 2 documents, offline discussions were needed. In case agreements were reached, they should be reviewed in the plenary session.

R1-01-0093, "Main path Rx Timing Deviation for 1.28 Mcps TDD", Siemens (Not reviewed in the plenary after all.) **R1-01-0098**, "Timing Advance (T_{ADV}) Measurement in 1.28 Mcps TDD", Siemens (See No. 91)

The Ad Hoc report was approved without any comments.

Chairman reminded people of the technical report which was requested by RAN to be completed by the next RAN plenary. Chairman suggested that the best approach would be that we should prepare a single text proposal for the TR and check it in the next meeting together with the working CRs which would be submitted to RAN. TR needs to be aligned with working CRs.

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
91	21	R1-01-0098	Timing Advance (T _{ADV}) Measurement in 1.28Mcps TDD	Siemens	Approved	(*1) Day4 16:51-16:53
92	21	R1-01-0160	Transmission of TPC commands in 1.28Mcps TDD	Siemens	Approved	No comments _{Day4} 16:54-16:55
93	21	R1-01-0159	The use and generation of the information fields transmitted in the FPACH	Siemens	Approved	(*2) Day4 16:55-16:59
94	21	R1-01-0158	Description of the FPACH	Siemens	Approved	No comments Day4 16:59-17:03
95	21	R1-01-0157	Revision of "Correction of the Mapping of TFCI Code Word for Very Short TFCI for 8PSK"	Samsung	Approved	No comments _{Day4 17:04-17:05}

7.6.3 Leftovers from Ad Hoc 21

(*1) This document had gone through the offline discussion and was reviewed in the plenary. It was mentioned as an outcome of the offline discussion that following correction shall be done to this text proposal before being implemented into working CR.

- Removal of the granularity of (1/8 chips) because this is subject of RAN WG4

- Following should be included at the end

"Note: This measurement can be used for uplink synchronisation or location services."

(*2) Table X should be removed from section 5.6.2.1.

Section 5.6.2.1.4, "may" should be inserted to the second sentence as follows The network <u>may</u> set this value based on the measured interference level (1) (in dBm) on the specific PRACH and on the desired signal to interference ratio (SIR) (in dB) on this channel as follows:

(*3) There was a comment on section 6.3.3.1.4 that the mapping of the power level to logical space should be done in RAN WG4 for the first place.

It was proposed and agreed to replace the sentence in 6.3.3.1.4 with

"The transmit power level command is transmitted in 7 bits."

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
96	147	-	25.214	R1-01-0087	Improved Uplink Power Control	С	Siemens	Approved in principle	(*1) Day4 09:06-09:20
97	-	-	-	R1-01-0115	Impact of the introduction of improved power control at power control limits	-	Nortel	LS will be sent to R4	(*1) Day4 09:21-09:45

7.7 RAN technical small enhancements and improvements --- Improved Uplink Power Control

(*1) In R1-01-0087 besides the proposed CR, further simulation results were also presented. In addition, answers for the questions raised to **R1-00-1447** in RAN WG1#17 meeting were also provided.

R1-01-0115 discussed the possible ways of introducing the proposed feature in release 4 and the potential impact on the system performance in terms of power management at the RNC level. The main concern in this paper was the improved power control behaviour for the release 4 UE implementing this feature in Release 99 networks. This paper listed 2 possible way of introducing this feature into the system.

There was a comment that in release 99 networks, release 4 UE must act as an release 99 UE and therefore there would be no problem.

It was answered that there is no corresponding test case in RAN WG4 for this feature. For the release 4 UE implementing this feature there is only one algorithm and even when in release 99 network we will have this behaviour because this is not addition of the new feature but the replacement of the behaviour.

Chairman concluded to send LS with R1-01-0087 attached to RAN WG4 as was proposed by Nortel in order to ask their view on this feature.

The LS was drafted by Nortel in **R1-01-0162**. This was reviewed in afternoon and approved in **R1-01-0171**. (See No. 110)

There was question on the approval of the CR. Chairman answered that CR was approved in principle and it should be mentioned in the LS as well. Having RAN WG4 on this issue, we will make a decision in the next meeting. There was one comment that as was stated by the proponent, the description of the CR is not necessary easy to understand and therefore some kind of block diagrams should be included. Chairman invited proponent to provide the revision for readability on the e-mail so that people can check it before the next meeting.

7.8 Radio link performance enhancements (Ad Hoc 27)

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
98	27	R1-01-0030	Further Results on CPICH Interference Cancellation as A Means for Increasing DL Capacity	Intel	Noted	(*1) Day4 09:45-09:57

(*1) This paper is the continuation work of **R1-00-1371** which was reviewed in RAN WG1#17 meeting.

Further simulation results on the proposal for the UE to cancel multiple access interference (MAI) associated with the pilot channels of the active and neighbouring base stations were presented. It was shown again that CPICH cancellation can increase capacity by 10% or more with relatively small computational complexity. As was suggested in RAN WG1#17, the proponent is going to present this scheme in RAN WG4. Mr. Peter Chambers (Siemens) remarked that since this is considered as release 5 or after item, the improved

performance requirements on the UE receiver would likely be on the release 5 UEs only. In that case, with the mixture of release 99, release 4 and release 5 UEs, can we still achieve the said capacity increase ? → Capacity increase here will require all UEs to use this procedure. (Intel)

7.9 Tx Diversity (Ad Hoc 26) (Release 5)

The concepts of the proposed method should be provided in TSG RAN #12 (June, 2001) which means we have to have some sort of conclusion by our meeting in May at the latest

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
99	26	R1-01-0103	Simulation Results of the Tx Diversity Scheme with Beamforming Feature	Fujitsu	Noted	(*1) Day4 09:58-10:07

(*1) This is a continuation work of R1-00-1065. In the Ad Hoc 26 in RAN WG1 #15 meeting, Fujitsu proposed a new multiple antenna Tx-diversity scheme with a beamforming feature which supports a variety of antenna configurations and beamforming algorithms to achieve efficient Tx-diversity / beamforming gain depending on the spatial correlation characteristics. However R1-00-1065 did not contain any simulation result. In this current paper (R1-01-0103) the first simulation results were presented as agreed in RAN WG1#15 in order to show the benefits of this scheme. Following main points were shown in this paper with the simulation results.

- Proposed scheme combining Tx diversity and beamforming improves the performance regardless of UE mobility. Average Tx Ec/Ior can be reduced about 1.8–2.0 dB.

- Beamforming gain of the proposed scheme is independent of channel model and geometry.

Antenna spacing between sub-arrays was about $\lambda/2$ and soft handover was not considered in the simulations.

7.10 USTS (Ad Hoc 31) (Release 4 study item)

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
100	31	R1-01-0110	Study report for USTS (v0.0.2)	SK Telecom Nokia	Agreed	(*1) Day4 10:09-10:37
101	31	R1-01-0061	Comparison of soft handover schemes for USTS	LGE	Approved	No (*2) comments _{Day4} 11:06-11:17
102	31	R1-01-0062	TAB Field Improvements for USTS in Soft Handover	LGE	Noted	(*3) Day4 11:17-11:25
103	31	R1-01-0070	Code allocation rule for USTS	Samsung SK Telecom	Noted	(*4) _{Day4 11:26-11:39}

(*1) In RAN WG1 #17 meeting the first version of this TR (v0.0.0) (**R1-00-1380**) was presented and reviewed. It got a lot of comments for the revision and SK Telecom provided the revision of TR (v0.0.1) (**R1-01-0054**) in prior to the RAN WG1#18.

But during the meeting and before the reviewal, it was further revised into v0.0.2. The only one but still one astonishing change was made in section 4.1.3.2 compared to v0.0.1. Nokia joined the source companies in v0.0.2. Mr. Erik Dahlman (Ericsson) remarked regarding the following sentence in section 4.1.1 the cell size should not restricted to 10km radius because when we consider the solutions (application of USTS like WLL) it should not be limited to 10km. If we put the value of 10km as *an example* then it would be OK. Is there any fundamental reason for this 10km?

The proposed value for T_{ref} is the maximum one-way propagation delay and it comes to 128 chips for a cell radius of 10 km and a chip rate of 3.84 Mcps (this cell size is sufficiently large for indoor and micro cell environments).

→ Of course there must some limitation radius exist in terms of uplink synchronous transmission requirements. Mr. Volker Höhn (Mannesmann Mobilfunk) made a comment that the "10km cell" and still "indoor" or "micro cell" would not fit and therefore some rewording should be done.

Chairman suggested to remove the sentence in parentheses.

There was another comment regarding section 6.3 Different scrambling/channelisation code usage

that though there is a statement of "USTS does not require any additional hardware." in this section it is not true. \rightarrow Chairman suggested changing it to "USTS requires a small amount of additional hardware".

Conclusion : Revision should be made reflecting the above suggestions from chairman. Next version will be

v0.1.0 without revision mark. Revision can be found in **R1-01-0163**.

Hopefully by the end of the next meeting we will have the TR for RAN #11.

/ *** Coffee break 10: 38 - 11:05 ***/

(*2) Soft handover schemes for USTS, in which both original and target Node Bs are operated in USTS are discussed in this paper.

No comments were raised.

Chairman suggested that the text of this contribution would be incorporated in the TR v0.1.1 with revision marks.

(*3) 2 methods for improving the reliability of Timing Alignment Bit (TAB) in soft handover were presented in this paper. They are

⁻ Simple extension of Tx diversity Mode 1 rapidly degrades the performance in the high mobility region due to the limited feedback bandwidth.

- Allocation of higher power offset to TAB

- Increase of the transmission rate of TAB

Mr. Jussi Kahtava (Nokia) remarked that according to the latest USTS TR, the timing feed back to Node B had been changed from 20ms to 200ms. (See section 4.1.3.2) but TAB is still to be sent every 20ms which means UE can have 10 TABs in between making timing feed backs. By combining of these 10 TABs somehow it is possible to make more reliable TAB decision without having extra means proposed by this contribution. But this corresponds to the second method proposed by this contribution because it had not been made known

until this meeting that the feedback rate is to be changed from 20 msec to 200 msec. (See No. 100)

(*4) This is the revision of **R1-00-1160** which was reviewed in RAN WG1#17 meeting. In the reviewal in RAN WG1 #17 it was pointed out that this proposed method did not have any explicit improvement in code allocation efficiency if we chose the proper code allocation scheme for the comparison.

Samsung provided this paper in order to show what the improvement in code allocation efficiency really is by comparing with another OVSF code allocation scheme.

Chairman stated that still it is not quite clear what the benefit of this scheme is. (Situation has not changed at all since RAN WG1#17 meeting.)

There were no answers, no remarks made. Chairman concluded that this was noted.

8. Approval of the liaison statements as output from WG1

No.	Discussed Tdoc	Source	To/Cc	Title	Approved Tdoc	Notes
104	R1-01-0104	Philips Ericsson	R3 Cc:R4,R2	Answer LS to R1-00-1334 "RL timing adjustment by UTRAN"	R1-01-0135	No (*1) Comment Day2 13:51
105	R1-01-0101	Ericsson	R2	Answer to LS on Default configurations	R1-01-0101	(*2) Day2 19:14
106	R1-01-0064	Nokia	R2,R4 Cc:R3	RTD measurement in UTRAN	R1-01-0147	(*3) Day3 12:34,Day4 16:25
107	R1-01-0106	Nokia	R4	LS on compressed mode transmission gap length (TGL) 8	R1-01-0167	No (*4) Comment _{Day4 11:41}
108	R1-01-0105	Panasonic	R2 Cc:R3	LS to PCH message length	R1-01-0105	(*5) _{Day4 11:48}
109	R1-01-0090	Nortel	S4 Cc:R2	Reply LS on: "Liaison to 3GPP TSG RAN WG1 and 3GPP TSG RAN WG2 on the Efficiency of Packet-Switched Conversational Multimedia Service"	R1-01-0170	No (*6) Comment Day4 14:20
110	R1-01-0162	Nortel	R4 Cc:R2	LS on introduction of uplink power control at power control limits	R1-01-0171	(*7) _{Day4 14:30}
111	R1-01-0069	Samsung	R2, R3	LS on DSCH TFCI Split Mode	R1-01-0172	(*8) _{Day4 14:36}
112	R1-01-0143	Nortel	R4 Cc: R2,R3	LS on impact of compressed mode on DPCCH gating benefits	R1-01-0173	(*9) _{Day4 14:42}
113	R1-01-0148	Siemens	R2 Cc: R3	IPDL scheme for location services in TDD mode	R1-01-0174	(*10) _{Day4 14:46}
114	R1-01-0154	Lucent, Nokia Nortel	R2 Cc:R4	Answer to LS R2-010205 (R1-01-0145) "Results of HSDPA Study Item AdHoc"	R1-01-0176	(*11) _{Day4 16:23}
115	R1-01-0178	Ericsson Nokia Panasonic	R2	UE capability	R1-01-0178	No (*12) Comment Day4 16:31
116	R1-01-0165	Samsung	R2,R3,R4	LS on revision of TR 25.840 v2.1.0 on Terminal Power Saving Features	R1-01-0180	(*13) _{Day4 16:47}

(*1) Mr. Matthew Baker (Philips) presented this LS.

This is the answer liaison to **R1-00-1334** (R3-002726) in which RAN WG3 asked RAN WG1 how often a Radio Link Timing adjustment procedure might be required and whether RAN WG1 considers that the current WG3 solution, whereby a RL is deleted and established again, is sufficient for R99. R1-00-1334 was reviewed in RAN WG1 #17 meeting and T-doc **R1-00-1423** was allocated for the answer. Eventually the answer was not presented in RAN WG1#17. Now the answer was drafted in R1-01-0104 based on the discussion on the e-mail reflector. *Current WG3 solution is adequate for release99 but RAN WG1 would like to ask RAN WG3 to consider implementing a RL*

adjustment procedure for *a <u>future release</u>.* (*2) Mr. Dirk Gerstenberger (Ericsson) presented this LS.

(For the background information, see No.5)

In the draft LS the value of "8dB" was proposed for the example of dpcch-PowerOffset but it was removed because it is considered very huge step size. Instead chairman suggested to put "range" in the following sentence. *"RANI believes that it would be feasible to use a granularity <u>and range</u> requiring less bits for the parameter than currently used. "*

/*** Day2 ended at 19:14 ***/

- (*3) Mr. Jussi Kahtava (Nokia) presented this LS.
- The draft LS was reviewed on Day 3. (See No.90) Mr. Jussi Kahtava (Nokia) presented revised version R1-01-0147 on Day4 and it was approved.
- (*4) Mr. Ville Steudle (Nokia) presented this LS. This was based on the discussion of R1-01-0077 (See No.12)
- (*5) Mr. Hidetoshi Suzuki (Panasonic) presented this LS. This was based on the discussion of R1-01-0056. (See No.10) Mr. Serge Willenegger (Qualcomm) remarked that it should be confirmed in this LS that there are no cases where consecutive frames carrying PCH would need to be received by UE.
- (Because this was the point we discussed in Day1.)

(*6) Ms. Sarah Boumendil (Nortel) presented this LS in behalf of Ms. Evelyne Le Strat (Nortel).

- This is the answer LS to **R1-01-0029** (S4-000700R) which was reviewed on Day 1. (See No.1)
- (*7) Ms. Sarah Boumendil (Nortel) presented this LS. This was based on the discussion of **R1-01-0115**. (See No. 97) A small discussion was made regarding the first sentence in 4th paragraph that this could give the impression that there is already problem (impact) on the radio resource management.

During RAN WG1#18, it was discussed in [3] that simply replacing the release 99 UE behaviour at power control limits by the proposal contained in [2] <u>could have some impact on the radio resource management</u>. Chairman suggested that "could" had better be replaced by "might".

(*8) This LS is based on the discussion of R1-00-1269 which was discussed in RAN WG1#17 meeting.

Now this current LS is asking RAN WG2 and RAN WG3 view whether we should study the enhancement on hard split to support variable bit length TFCI for DCHs and DSCHs as a *Rel4/5* issue.

Chairman stated that we should put it as Rel-5 issue instead of putting Rel-4/5 issue because it is pretty late if we asked guidance of something to be studied for release 4.

(*9) Ms. Sarah Boumendil (Nortel) presented this LS. This was based on the discussion of **R1-01-0039** and **R1-01-0114**. (See No. 81 and No.82)

Chairman suggested that some phrase like "in the current concept" would better be put before the sentence of DPCCH gating cannot be used during these periods between compressed frames.

in the second paragraph because we are not talking something specified in the current specifications.

(*10) Mr. Siegfried Bär (Siemens) presented this LS. This was based on the discussion of **R1-01-0014**. (See No. 89) Chairman suggested that following sentence had better be added to the last so as not to give an impression that we are talking about some kind of no-go features.

"RAN WG1 hopes to be able to solve the remaining concerns in RAN WG1#19."

(*11) This is the answer liaison statement to **R1-01-0145** (R2-010205) which arrived at RAN WG1 and reviewed on Day 3. (See No. 57). To each of 5 questions RAN WG2 raised in their LS, RAN WG1 answer was provided.

Chairman remarked that the answer for question 4 should be modified as follows. *Therefore, it is well understood that the architecture will support multiple transport channels on a single CCTrCH for HS-DSCH*

Mr. Amitabha Ghosh (Motorola) remarked regarding the answer for question 3 that the following sentence should be removed because it is already mentioned in the TR.

Also, variable TTI is well suited for fat-pipe scheduling techniques such as those enabled by the Downlink Shared Channel. This remark was agreed.

Chairman stated that the text proposal for RAN WG2 TR contained in **R1-01-0144** (See No. 76) should be put in the LS.

There were no other comments and LS was approved as amended.

Chairman suggested to attach the RAN WG1 TR to this LS before sending it to RAN WG2. Since revised TR (**R1-01-0177**) was not available in the meeting, this LS shall be sent by the secretary after the R1-01-0177 is made available on the e-mail reflector.

(*12) After offline discussion, Panasonic, Ericsson and Nokia reached conclusion. The conclusion was summarized in this LS. This LS also contains a small proposed CR for TS 25.306 (CR 25.306-001). Chairman remarked in responding to the comment from Mr. Serge Willenegger (Qualcomm) that in case there are

comments/problems on this topic later, of course we will come back to this again and make a discussion in the next meeting.

(*13) Chairman remarked that following 2 bullet points should be removed because they had been removed from the revised TR. (See No.87)

- Include the results showing the impact of compressed mode on battery life enhancement

- Include the comments on the implementation dependency of UE battery life enhancement

Meeting closed at 17:08

Meeting	Year	Month	Date	Location	Hosts
RAN WG1 #10	2000	January	18-21	China	Nokia
RAN WG1 #11	2000	February	29 – March 3	USA	T1P1
RAN #7	2000	March	13-15	Madrid, Spain	
RAN WG1 #12	2000	April	10-13	Korea	TTA
RAN WG1 #13	2000	May	22-25	Tokyo, Japan	NTT DoCoMo
RAN #8	2000	June	21-23	Dusseldorf, Germany	
RAN WG1 #14	2000	July	4-7	Finland	Nokia
RAN WG1 #15	2000	August	22-25	Germany	Siemens
RAN #9	2000	September	20-22	Hawaii	
RAN WG1 #16	2000	October	10-13	Pusan, Korea	Samsung, LGIC
RAN WG1 #17	2000	November	21-24	Stockholm, Sweden	Ericsson
RAN #10	2000	December	6-8	Bangkok, Thailand	Unisys
RAN WG1 #18	2001	January	15-18	U.S.A. Boston	North American Friends of 3GPP
RAN WG1 #19	2001	February	27 – March 2	U.S.A. Lasvegas	Motorola
RAN #11	2001	March	13-16	Palm Springs, CA U.S.A.	North American Friends of 3GPP
Physical Ad Hoc	2001	April	5-6 (?)	Sophia Antipolis with R2	
RAN WG1 #20	2001	May	21-25 (5days)	Cheju ?, Korea withR2,3	Samsung
RAN #12	2001	June	12-15	Stockholm, Sweden	Ericsson
RAN WG #21	2001	June	26-29	Paris, France	Nortel(tentative)
RAN WG #22	2001	August	27-31	T.B.D.	Host needed
RAN #13	2001	September	18-21	Beijing, China	Lucent, CWTS
RAN WG #23	2001	October	8-12	T.B.D.	Host needed
RAN WG #24	2001	November	19-23	T.B.D.	Host needed
RAN #14	2001	December	11-14	Kyoto, Japan	ARIB, TTC
RAN #15	2002	March	5-8	(Korea)	TTA
RAN #16	2002	June	4-7	(Europe)	Motorola
RAN #17	2002	September	3-6	(France)	Alcatel
RAN #18	2002	December	3-6	(U.S.A.)	North American Friends of 3GPP

9. WG1 meeting schedule in year 2000 -2002(Tentative)

Annex A : List of approved CRs (Approved in RAN WG1 #18 meeting)

1. TS 25.211

No.	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref.	V_old	V_new
1	25.211	091	-	R1-01-0034	DSCH reading indication	F	Ericsson	18-11	3.5.0	3.6.0

2. TS 25.214

No.	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref.	V_old	V_new
1	25.214	142	1	R1-01-0112	Uplink power control in compressed mode	F	Philips	18-27	3.5.0	3.6.0
2	25.214	144	-	R1-01-0052	Removal of the power balancing algorithm from TS 25.214	F	NEC	18-13	3.5.0	3.6.0
3	25.214	145	-	R1-01-0053	Clarification of Nid parameter – when SSDT and uplink	F	NEC, Telecom	18-14	3.5.0	3.6.0
4	25.214	146	-	R1-01-0085	Clarification of closed loop transmit diversity mode 1 and	F	Motorola	18-15	3.5.0	3.6.0

<u>3. TS 25.215</u>

No.	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref.	V_old	V_new
1	25.215	079	2	R1-01-0107	Correction of the observed time difference to GSM	F	Nokia	18-28	3.5.0	3.6.0
2	25.215	081	-	R1-01-0071	Removal of UE SIR measurement	F	Ericsson	18-17	3.5.0	3.6.0

4. TS 25.221

No.	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref.	V_old	V_new
1	25.221	037	1	R1-01-0019	Bit Scrambling for TDD	F	Siemens	18-20	3.5.0	3.6.0
2	25.221	039	1	R1-01-0111	Corrections of PUSCH and PDSCH	F	Siemens	18-30	3.5.0	3.6.0
3	25.221	040	-	R1-01-0021	Alteration of SCH offsets to avoid overlapping midamble	F	Siemens	18-31	3.5.0	3.6.0
4	25.221	041	-	R1-01-0022	Clarifications & Corrections for TS25.221	F	Siemens	18-32	3.5.0	3.6.0

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5. TS 25.222

No	. Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref.	V_old	V_new
1	25.222	051	1	R1-01-0019	Bit Scrambling for TDD	F	Siemens	18-21	3.5.0	3.6.0
2	25.222	054	-	R1-01-0023	Corrections & Clarifications for TS25.222	F	Siemens	18-33	3.5.0	3.6.0

6. TS 25.224

N	o. Sp	pec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref.	V_old	V_new
-	1 25.	.224 (036	-	R1-01-0153	DTX and Special Burst Scheduling	F	InterDigital	18-35	3.5.0	3.6.0
2	2 25.	.224 (037	-	R1-01-0073	RACH random access procedure	F	InterDigital	18-34	3.5.0	3.6.0
3	3 25.	.224 (045	-	R1-01-0016	Introduction of closed-loop Tx diversity for the PDSCH and	F	Siemens	18-19	3.5.0	3.6.0
4	4 25.	.224 (046	-	R1-01-0017	Corrections of TDD power control sections	F	Siemens	18-25	3.5.0	3.6.0

7.TS 25.225

No.	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref.	V_old	V_new
1	25.225	023	-	R1-01-0107	Correction of the observed time difference to GSM	F	Nokia	18-29	3.5.0	3.6.0

(*1) Total 18 CRs were approved in RAN WG1#18 meeting. One CR for TS 25.306 was approved and sent to RAN WG2 (See No. 115)
 (*2) CR number for the CR contained in R1-01-0017 has been changed from 031 to 046 by the secretary because there was a contradiction between T-doc subject and actual CR number put in the cover sheet. CR database is also suggesting that it should be 046. If Siemens can clarify which is correct, it will be appreciated, though...
 (*3) R1-01-0111 CR 25.221-039 needs to be revised. (See No.18, 30)

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Annex B	The	Partici	pants	List
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Appendix C

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Appendix D

TSG-RAN Working Group 1 meeting No. 20 May 21- 25, Pusan, Korea

TSGR1-01-0435

Agenda Item:

Source: Secretary

-

Title: Revised minutes of WG1 #19 meeting

Document for: Approval

Revised Minutes for 3GPP TSG-RAN WG1 19th Meeting

Meeting start: February 27th, 2001, in Las Vegas, NV, U.S.A.

Day 1, started at 09.08

1. **Opening of the meeting** (09:08-09:12)

The chairman, Mr. Antti Toskala (Nokia), opened the meeting. On behalf of the hosting company(Motorola), Mr. Amitava Ghosh welcomed the meeting.

2. Approval of agenda (R1-01-0189) (09:12-09:21)

For agenda point 3 *Report from TSG RAN Ad Hoc on UTRAN Evolution*, Chairman announced that he would present it in the afternoon. It was presented at the end of Dayl very briefly and document was not distributed. (See section 5) Chairman added agenda point 4 for the election of the officials. Checking of the candidates would take place in the afternoon.

No.	Title	Source	To/Cc	Tdoc No.	Source Company	Notes
1	LS to TSG-T WG1 on cell selection timing	GE RAN	CC	R1-01-0191 (GP-010386)	T-Mobil	Noted. (*1)
2	LS on UE Simultaneous Physical Channels Combinations for 1.28 Mcps TDD	R2	ТО	R1-01-0192 (R2-010244)	CATT	Noted. (*2)
3	Response to LS (R1-010180) on Revision of TR 25.840 V1.1.0 on Terminal Power Saving Features	R2	ТО	R1-01-0193 (R2-010245)	Samsung	Noted. (*3)
4	Response to LS (R1-010172) on DSCH TFCI Split Mode	R2	ТО	R1-01-0194 (R2-010246)	Samsung	Noted. (*4)
5	Response LS on DSCH TFCI Split Mode	R3	ТО	R1-01-0264 (R3-010327)	Samsung	Noted. (*5)
6	Response to LS (S4-000700R) on Efficiency of Packet Switched Conversational Multimedia Service	R2	CC	R1-01-0195 (R2-010251)	Siemens	Noted. (*6)
7	Clarification request on measurements definition and accuracy	R3	ТО	R1-01-0196 (R3-010325)	Nortel	Noted. (*7)
8	LS on power balancing accuracy requirement	R4	ТО	R1-01-0197 (R4-010161)	Nokia	Postponed to Day2(*8) Day1 10:15-10:27
9	Response to LS (R1-010173) on impact of compressed mode on DPCCH gating benefits	R4	ТО	R1-01-0198 (R4-010194)	Nokia	Noted. (*9)
10	LS to RAN WG1: Amendments to application of beam forming in release 4	R4	ТО	R1-01-0199 (R4-010202)	Nokia	Noted. (*10)
11	Response to RAN WG1 LS on compressed mode transmission gap length (TGL) 8 and further limitations on compressed mode usage in 25.133	R4	ТО	R1-01-0200 (R4-010223)	Nortel	Noted. (*11)
12	LS for UMTS-1800 work required from other working groups	R4	ТО	R1-01-0230 (R4-010352)	Motorola	Noted. (*12)
13	LS on TSG-SA4 request for information with regard to RAN handling of bit erroneous SDUs within packet switched domain radio bearers	S4	-	R1-01-0298 (S4-000652)	?	Noted. (*13)
14	LS on power control preamble	R2	ТО	R1-01-0316 (R2-010742)	Ericsson	Noted \rightarrow CR (*14) _{Dayl 17:42-17:45}
15	Response to LS (R4-010193) on Effect of a repeater on OTDOA-based positioning accuracy	R2	CC	R1-01-0323 (R2-010753)	Panasonic	Noted. (*15)
16	LS on Release 4 UE Support for CPCH	R2	CC	R1-01-0314 (R2-010740)	GBT	Noted \rightarrow Day3 (*16) Day1 18:14-18:23
17	Response to LS (R1-010105) on PCH message length	R2	ТО	R1-01-0315 (R2-010741)	Nortel	Noted. (*17)
18	LS on Power offset P _{Pilot-DPDCH}	R2	ТО	R1-01-0318 (R2-010744)	NTT DoCoMo	Noted. (*18)
19	LS on Physical Channels Combinations for 1.28 Mcps TDD	R2	ТО	R1-01-0321 (R2-010747)	CWTS/ CATT	Treated in AH21 See R1-01-0367
20	Response to LS (R3-010317, R3-010325 and R1-010147) on RTD measurement in UTRAN	R2	ТО	R1-01-0319 (R2-010745)	Qualcomm	Noted. (*19)
21	LS on DSCH related updates for Rel'4 UE capabilities for the UE Radio Access Capability parameter combinations	R2	ТО	R1-01-0320 (R2-010746)	Nokia	Noted. (*20)
22	LS on Improved OLPC for FACH	R2	ТО	R1-01-0322 (R2-010749)	GBT	Noted \rightarrow Day3 (*21) Day2 09:28-09:33
23	Response to LS (S4-000652) on RAN handling of bit erroneous SDUs within packet switched domain radio bearers	R2	CC	R1-01-0324 (R2-010756)	Nokia	Noted. (*22)
24	LS on Delay times in the control plane	R2	CC	R1-01-0365 (R2-010752)	Samsung	Noted. (*23)
25	LS Answer on Introduction of Uplink Power Control at Power Control Limits	R4	ТО	R1-01-0364 (R4-010471)	Siemens	Noted. (*24)
26	LS on Default configurations	R2	ТО	R1-01-0362 (R2-010748)	Ericsson	Noted. (*25)

3. Identification of the incoming liaison statements and actions in the answering

27	Reply on Default Configurations for Handover	S4	ТО	R1-01-0201 (S4-010122)	Ericsson	Noted. (*25)
28	LS for "Reply on Default Configurations for Handover"	N4	ТО	R1-01-0208 (N4-010283)	Tellabs Ericsson	Noted. (*25)
29	Answer LS on clarification request on measurements definition and accuracy	R4	ТО	R1-01-0363 (R4-010364)	Qualcomm	Noted. (*26)
30	LS on TDD DPCH Transmit Diversity Indication	R2	ТО	R1-01-0317 (R2-010743)	Interdigital	Postponed. (*27)

(*1) This is the answer liaison from GERAN to TSG T WG1. RAN WG1 received this LS as CC. Since there was no action expected from RAN WG1, chairman concluded this as 'Noted'. There were some issues related to RAN WG4 and RAN WG2.

(*2) In this LS which had been sent out from RAN WG2#18, RAN WG2 was requesting RAN WG1 for its reviewal of the attached CR which covers aspects of UE simultaneous physical channel combinations for 1.28 Mcps TDD. Our answer was expected to be provided before RAN WG2#19. Since RAN WG2#19 had been scheduled to be held one week earlier than RAN WG1#19, this LS had been put on the RAN WG1 e-mail reflector for comments right after the RAN WG2#18. After having some comments, chairman sent RAN WG1 view on this issue to RAN WG2 e-mail reflector. (Copy was also sent on the RAN WG1 e-mail reflector on Feb. 15 as well) Based on this view, RAN WG2 continued their work in RAN WG2 #19 and produced a new liaison in **R1-01-0321**. As this new liaison was not available in the morning of Day1, Chairman proposed to revisit this issue after everyone got the R1-01-0321. After all, it was reviewed in TDD Ad Hoc and not reviewed in the plenary. (See No. 19)

(*3) This is the answer liaison statement to **R1-01-0180** which we sent out in RAN WG1#18 meeting. We had asked them to study the "Terminal Power Saving Feature" based on RAN WG1 TR attached.

This LS informed us a kind of drastic change in the view of the benefit of the Gating scheme in RAN WG2. It says

RAN2 would like to inform RAN1 and RAN4 of its status. RAN2 has discussed on the work item and one concern is issued regarding the benefits of the gated DPCCH transmission associated with DSCH over using CELL_FACH process. It was recognized that moving to CELL_FACH is better from terminal saving point of view. Still, gains were claimed from the point of signalling load and delay aspects. Contributions were invited for WG2#19 on comparing delay aspect and signalling between using CELL_FACH and gating and an e-mail discussion would be held to discuss comparison.

At the time of this LS presentation, we had received no continuous LS from RAN WG2#19 and so we were not able to see the latest situation in RAN WG2 on this topic. But it was quite clear that in RAN WG2, the issue was still open (further fundamental discussion is needed). Chairman suggested that in RAN WG1 we should aim to finalize the issue on the TR then discuss in coming RAN about what should be done on the Gating which is release 4 work item. Chairman stated that there would be no point in going to the approval of the CRs on this topic during this week in RAN WG1 in case the issues are still open in RAN WG2 because for release 4 issues, it is a key that all linked CRs of all groups are available. Even if we approved the CRs they will not be treated in RAN if other working groups do not agree on the issue.

There took place a bit long discussion on how we should proceed with this topic.

<u>Conclusion</u>: This LS was noted. We would not approve any CRs on this topic in this meeting. We will review and finalize the TR. RAN will be asked the guidance on how we should proceed with this work item. There may be a joint session with RAN WG2 on this issue in May in Korea because we would have collocated meeting with RAN WG2 and RAN WG3. On day2 we received related new LS from RAN WG2. (See No. 24)

(*4) Mr. Ju Ho Lee (Samsung) presented this LS. This is the answer liaison statement to R1-01-0172 which we sent out from RAN WG1#18 meeting in which we asked RAN WG2 and RAN WG3 whether our understanding on DSCH TFCI split mode is correct or not. RAN WG2 was answering that our understanding is correct and also encouraged RAN WG1 to study the enhancement on hard split to support variable bit length TFCI for DCHs and DSCHs as Release 5 issue.

(*5) Mr. Ju Ho Lee (Samsung) presented this LS.

This is the answer liaison statement from RAN WG3 to **R1-01-0172** (See above). RAN WG3 made almost similar comment as RAN WG2.

Ms. Evelyne Le Strat (Nortel) remarked that we should note in order to avoid misunderstandings that we are speaking here about a set of fixed length TFCI which is just different from 5 + 5. We are definitely not speaking about variable length TFCI and we should not speak about it. She added that on whether we should allow all possible combinations or we should have certain number of possible combinations subset, it is up to RAN WG1 to see what would be feasible from channel coding point of view having opinions from RAN WG2 and RANWG3. There was another comment saying that we should not have different coding scheme for different split.

(*6) Mr. Marcus Purat (Siemens) presented this LS. In RAN WG1 #18 meeting we received LS from SA WG4 on the efficiency of packet-switched conversational multimedia service(R1-01-0029). We already discussed it and sent our answer to SA WG4(R1-01-0170). RAN WG2 also received same LS from SA WG4 and this is its answer to SA WG4 and SA WG2. They sent this to us as CC.

RAN WG2 was indicating that there is nothing that prevents UTRAN from supporting multiple flows with unequal error protection for IP multimedia services and suggesting that SA WG4 seeks guidance from SA WG2

and RAN WG3 on the architectural issue.

No comments were raised. Chairman concluded that this was noted.

(*7) Ms. Sarah Boumendil (Nortel) presented this LS.

RAN WG3 has identified the need for several measurements for the purpose of UE Positioning function and they were asking in this LS to RAN WG1 to define RTD measurement as describe in TS 25.305. In addition, RAN WG3 was also asking relevant accuracy issues to RAN WG4.

Chairman remarked that we would see some CRs related to this RTD measurement during this meeting. Mr. Serge Willenegger (Qualcomm) pointed out that R1-01-0319 is the answer from RAN WG2 to this LS. Mr. Sarah Boumendil indicated that there is relevant LS coming from RAN WG4 (**R4-010364**). As this RAN WG4 LS was not received at this point of time, chairman suggested that we would review those relevant 2 liaisons when we go through the RTD related CRs.

R4-010364 was received on Day2 and numbered as **R1-01-0363**. This was reviewed on Day (See No. 29) (*8) Mr. Markku Tarkiainen (Nokia) presented this LS.

This is the answer from RAN WG4 to RAN WG3 LS (R3-002576) in which RAN WG3 proposed to move accuracy requirement related to power balancing algorithm from its specification TS 25.423 (RNSAP) and TS 25.433 (NBAP) to RAN WG4 specifications introducing new parameter α . But RAN WG4 felt it is not necessary to define new parameter α . As an alternative RAN WG4 proposed to modify the description in TS 25.214 so that it would indirectly refer to existing requirement set for power control step sizes. They attached to this LS a sample text proposal for TS 25.214.

There was one concern raised that the need for this change is not quite clear.

Chairman suggested offline checking with our RAN WG4 colleagues. He postponed the decision to Day2. (See No.41)

(*9) Mr. Markku Tarkiainen (Nokia) presented this LS.

This is the answer LS from RAN WG4 to **R1-01-0173** which we sent out from RAN WG1#18 meeting in Boston in which we asked RAN WG4 about the foreseen use of compressed mode in terms of percentage of time when the compressed mode is active because it could lead to a degradation of the battery savings benefits brought by DPCCH gating.

Although there was no concrete answer in terms of percentage, RAN WG4 answered in this LS that it believes that continuous use of compressed mode should be avoided and there will be always a notable number of users in operators' network who do not have compressed mode activated. In addition RAN WG4 proposed to use DPCCH gating even during the compressed mode because even if compressed mode patter is active, not every frame is compressed. In general, this LS seemed to support the benefit of DPCCH gating.

Mr. Dirk Gerstenberger (Ericsson) remarked that there seems a mixture of compressed frames and compressed mode in the bullet points in the LS.

Chairman suggested discussing this issue when we review DPCCH gating documents later.

Philips had prepared related paper on this issue (text proposal to TR 25.840) in **R1-01-0280**. This was reviewed and approved on Day 2. (See No. 95)

/**coffee break 10:38-11:10 **/

(*10) Mr. Markku Tarkiainen (Nokia) presented this LS.

RAN WG4 is studying and introducing requirements for UE when beam forming without S-CPICH. In this case UE would need to use dedicated pilots for a phase reference. RAN WG4 aims to have related test included for release 4 and is recommending that RAN WG1 provide needed amendments for release 4 WG1 specifications so that beam forming concept using dedicated pilots can be finalized in all levels of RAN specifications for release 4. Chairman remarked that there would be a couple of Nokia CRs addressing this issue including CRs for release 99 specifications. He proposed to review all these CRs in the reviewal of release 99 CRs because they are closely related to each other.

Ms. Evelyne Le Strat (Nortel) remarked having a look at those CRs that release 99 CRs may be more than correction for release 99. This comment was noted.

Since there was no action expected from this LS, chairman concluded that this LS was noted.

Relevant CRs were reviewed and approved after some modifications. (See No. 32,33,63,64)

(*11) Ms. Sarah Boumendil (Nortel) presented this LS.

This is the answer LS from RAN WG4 to **R1-01-0167** which we sent out from RAN WG1#18 meeting in Boston. In RAN WG1#18 there was a CR(**R1-01-0077** CR 25.212-104) which proposed to introduce transmission gap length of 8 slot as used in some of the compressed mode parameter examples in TS 25.133. But since this change was more than a correction, we sent LS (**R1-01-0167**) to RAN WG4 to ask for the reason why they introduced TGL=8 in their specifications.

In the current LS, RAN WG4 was answering that in RAN4#15 meeting in Boston it was agreed that, while TGL=8 does provide some advantage, similar performance could also be achieved using the existing TGL value of 10 and the late introduction of a new value into the specifications could not be sufficiently justified. It was therefore agreed to remove the associated patterns from TS 25.133. With respect to the possible inclusion of TGL values of 8 in Release 4 specifications, RAN WG4 has not reached any conclusion at this point.

So, receiving this answer there is no more point for RAN WG1 to include TGL=8 in our specification for release 99. Therefore CR25.212-104 in R1-01-0077 which had been on-hold was rejected. As Nokia had prepared CR addressing this issue for release 4, this would be reviewed later during this meeting. (See No. 61)

Chairman suggested offline checking with RAN WG4 colleagues regarding the bullets point in this LS whether we should put something in our specifications or not.

Mr. Tim Moulsley (Philips) remarked that we might need to send an answer LS to RAN WG4 to inform RAN

WG1 situation on this issue. Chairman agree with this comment. But after all no answer was made in this meeting.

(*12) The delegate from Motorola presented this LS.

/** Although the source of the LS is being put as "Motorola", this was officially approved in RAN WG4 #16 meeting **/ At RAN#9 a work item on UMTS-1800 was agreed for which RAN4 is the leading working group. Whilst the majority of this work falls within the scope of RAN4 there are a few aspects that should be covered by other RAN working groups. The intention of this LS is to inform other working groups the outline of the work required by other groups.

According to this LS, there is no work envisaged by RAN WG4 for RAN WG1 on this work. Mr. Tim Moulsley (Philips) remarked that although we do not have to do anything with this particular LS, but we need to bear in mind what will be done on the UE capabilities especially for compressed mode in relation to this work item. This comment was noted.

(*13) This LS was sent from SA WG4 to RAN WG2 originally. But RAN WG2 considered that this needs to be looked at by RAN WG1 as well and so they forwarded this to RAN WG1.

Chairman presented this LS.

SA4 has started working on definition of codecs for packet switched multimedia services, both for the conversational real-time services provided by the IM Subsystem and the transparent packet switched multimedia streaming service. SA4 assumption is that codec data is encapsulated into RTP/UDP/IP packets and header compression is performed by the PDCP layer. During discussion SA4 felt the needs for clarifications from radio protocol technical point of view and they sent questions on following 2 issues.

- Residual bit errors and handling of erroneous SDUs

- CRC options

Chairman remarked that question on CRC options would fall into RAN WG1 scope and some answer should be sent. Chairman asked Ms. Evelyne Le Strat (Nortel) to draft an answer.

The answer was drafted in **R1-01-0339**. This was reviewed on Day4 and approved into **R1-01-0426**. RAN WG2 has also sent an answer to SA4. We received their answer as CC in **R1-01-0324**(R2-010756). This was reviewed on Day2. (See No. 23)

- (*14) Mr. Dirk Gerstenberger (Ericsson) presented this LS.
 - This LS was informing the result of RAN WG2#19 discussion on power control preamble. RAN WG2 concluded a series of discussion on this issue. (See **R1-00-1293**, **R1-00-1413**, **R1-00-1491**). They did not see a need to introduce special behaviour or handling in RAN WG2 specifications handling the TFC or TFCI value used during the power control preamble. This was seen as L1 functionality and is only referenced in RRC. Having our request, RAN WG2 increased the power control preamble length to a maximum of 7 frames. And in the course of this discussion they identified one problem regarding TTI alignment in relation to PCP. Ericsson had prepared new CR for this issue. It was reviewed right after the reviewal of this LS. (In fact, CR had been reviewed before this LS, but the decision was postponed until we review this LS.) (See No. 53, 54, 70)
- (*15) This was an answer LS from RAN WG2 to RAN WG4. Because this was sent to us as CC and no action seems to be expected from RAN WG1 (Chairman confirmed this with Mr. Hidetoshi Suzuki (Panasonic)), chairman concluded this as noted without going through the LS.

(*16) Mr. Joe Kwak (GBT) presented this LS.

In RAN WG2#19, it discussed CR 25.306-009 (R2-010664, embedded in this LS) which proposed to add UE support for CPCH as optional in 32 kbps uplink class and mandatory for all other uplink classes in Release 4. This LS was informing us the discussion points in RAN WG2. Since the CR had not been proposed in RAN WG2, no decision was taken and the CR had not been agreed. As the proposal seems to involve RANWG1 aspects, RANWG2 was requesting in the LS that RANWG1 discuss the CR and provide recommendations to next RAN. Mr. Joe Kwak explained that GBT has 3 more documents on this CPCH topic and he proposed to discuss all these documents on Day3 with other release 4 topics. Chairman agreed with this proposal. (See section 8.7) (*17) Ms. Sarah Boumendil (Nortel) presented this LS.

This was answer LS to **R1-01-0105** which was sent out from RAN WG1#18 meeting regarding the length of the PCH message.

RAN WG2 confirmed that the paging message length sent on PCH is limited to one 10 ms frame length. Therefore no segmentation is performed in the higher layer (i.e. RLC). RAN WG2 confirmed also that there are no cases where consecutive frames carrying PCH transport blocks have to be received by a particular UE. R1-01-0105 was the outcome of the discussion related to **R1-01-0056** which proposed to clarify that the S-CCPCH carrying the paging information should be one single frame. Since we received the answer from RANWG2 that there are no cases where consecutive frames carrying PCH transport blocks have to be received by the UE, Panasonic presented the revision of R1-01-0056 (CR 25.211-092r1, **R1-01-0368**) on Day2 and this was approved. (See No. 60)

(*18) Mr. Masafumi Usuda (NTT DoCoMo) presented this LS.

In RAN WG2#19, a CR which specifies that the power-offset value is signalled to the UE for each radio link was approved. However it was pointed out during the RAN WG2 discussion whether the power offset value is necessary for each radio link or one power offset value per UE. In this LS, RAN WG2 was asking RAN WG1 guidance on this issue.

Some discussion took place. Conclusion was as follows.

If we have the same power offset for all the radio links (per UE) it would simplify SIR estimation process. Unless we see the reason why there should be different power offsets for different radio links or benefit for having different offset, we should consider the same power offset at least for release99 from physical layer point of

view.

Chairman proposed that in order to avoid the mess in RAN (by killing RAN WG2 CR) we should admit RAN WG2 CR as it is and instead put the restriction in RAN WG1 specs that all radio links should have the same power offset. RAN WG2 specs would be revised in the future to reduce unnecessary signalling for this. RAN WG2 and RAN WG3 needs to be informed that there would be some inconsistency (restriction in R1) on this issue.

Though **R1-01-0360** CR 25.214-162 was allocated for this CR it was not presented during the meeting due to the lack of time. After the meeting was over Mr. Markku Tarkiainen (Nokia) posted R1-01-0360 on the e-mail reflector. Chairman proposed on the reflector to submit this CR to RAN with source name as Nokia in order to avoid e-mail approval of the CR. But in RAN 11 this CR was not presented. (to my understanding.) (*19) Mr. Serge Willenegger (Qualcomm) presented this LS.

(1) Mil. Steige witheleger (quaterining) presented this ES.
 This is an answer LS to R1-01-0147 which we sent out from RAN WG1#18 meeting.
 In RAN WG1#18 meeting, a document(R1-01-0064) was discussed in which new UTRAN measurement for the support of OTDOA measurement in UTRAN Rel-4 UE positioning to be in line with the description of RTD measurement in TS 25.305 *Stage 2 Functional Specification of UE Positioning* in UTRAN, v3.4.0.
 In this answer LS, RAN WG2 was informing us that the measurement we proposed is in line with their expectation. We also received relevant LS from RAN WG3 and RAN WG4. (See No. 7, 29)
 Siemens and Nokia prepared CR for inclusion of RTD measurement for TDD and FDD respectively. Having this LS from RAN WG2, those CRs were reviewed and approved on Day4. (See No. 89 and 91)

(*20) Mr. Markku Tarkiainen (Nokia)

This is an answer LS to **R1-00-1483** which was sent from RAN WG1#18 meeting. RAN WG2 was informing us that it approved a CR which we attached to R1-00-1483 in which the DSCH related capability, support of PDSCH, is modified for the 384kbps class by changing the indication Yes/No to Yes. In addition RAN WG2 was considering similar change to 128 kbps class and was asking RAN WG1 to provided the revision of the attached CR to RAN if RAN WG1 agrees with RAN WG2 on this issue.

Mr. Dirk Gerstenberger (Ericsson) opposed to this idea. Chairman agreed and concluded that we would not touch 128 kbps class.

(*21) Mr. Joe Kwak (GBT) presented this LS.

RAN WG2 was asking RANWG1 to study the Layer 1 DL Probe procedure for Improved OLPC for FACH described in the attached document. (**R2-010341**) There were several questions listed in the LS regarding DL probe procedure mainly on the benefits of this procedure.

Mr. Joe Kwak (GBT) proposed to treat this issue in the similar way of CPCH issue on Day3 with other release4 topics. (See Section 8.7)

(*22) Mr. Markku Tarkiainen (Nokia) presented this LS.

On Day1 we treated LS from SA WG4 (S4-000652) which had not been sent to us directly but had been forwarded by RAN WG2 for discussion. We discussed the LS in **R1-01-0298** (See No.13) and concluded that we should make an answer for the CRC option part of their questions.

The current LS is the RAN WG2 answer to SA WG4(S4-000652). They send a copy to RAN WG1. In this answer LS, RAN WG2 mentioned to SA WG4 that more detailed view on CRC issue might be provided by RAN WG1. This is in line with our intention.

(*23) Mr. Ju Ho Lee (Samsung) presented this LS.

In RAN WG2 there have been discussions on the benefits of Gated DPCCH Transmission (Gating) over using CELL_FACH state. The gains of Gating over using CELL_FACH are being discussed in terms of signalling load and delay aspects. Regarding these signalling load and delay aspects, RAN WG2 sent LS to RAN WG3 to ask for their guidance. RAN WG2 sent this LS to RAN WG1 as CC informing the current situation in RAN WG2 on DPCCH gating. RAN WG2 has not yet reached a conclusion on Gating.

(*24) Siemens presented this LS.

This is the answer LS to **R1-01-0171** which we sent out from RAN WG1#18 meeting in which we asked RAN WG4 2 questions regarding the feasibility of *introduction of uplink power control at power control limits* in terms of backward compatibility and performance requirements.

In this LS RAN WG4 was answering that although they do not see any problem on the backward compatibility issue, there were concerns raised on accuracy issues. RAN WG4 confirms the gain but it could be achieved only by using the algorithm in the ideal conditions which means in order for this scheme to achieve gain, the accuracy requirements may need to be unacceptably tightened. Complexity will be increased considerably.

Siemens remarked that although Siemens does not see any complexity increase, other companies do have complexity increase. Having this LS received Siemens proposed to postpone the proposal of *Improved uplink power control* and continue the discussion for release 5. Siemens stated that the last paragraph of the this LS should be noted because it was pointing out some possible problems from an implementation point of view regarding the power control algorithm specified in the current TS 25.214, section 5.1.2.6., where it is stated that scaling shall not be applied if a UE operating below -50 dBm receives power up commands. Chairman encouraged the people to consider this problem and make some inputs offline.

R1-01-0387 was allocated for this input.

On Day4 it was announced by Siemens that after having offline discussion with Mr. Tim Moulsley (Philips) Siemens concluded that we do not see the necessity to change RAN WG1 specification since we do not really understand what the problem is. Moreover it can be considered that RAN WG4 can solve this problem within their specifications from the implementation point of view. Therefore this T-doc (R1-01-0387) was withdrawn. Chairman agreed with this decision and stated the he would have some clarification from RAN WG4 chairman

on this issue in the next RAN. (Day4 09:25)

(*25) Mr. Dirk Gerstenberger (Ericsson) presented all these 3 LSs.

Main LS was **R1-01-0362**(R2-01-0748) and other 2 LSs **R1-01-0201** (S4-010122), **R1-01-0208** (N4-010283) were presented for supplementary information. R1-01-0201 was the answer LS from SA WG4 to RAN WG2 (R2-002463) which we had treated in RAN WG1#17 meeting. SA WG4 was pointing out the differences UMTS_AMR2 codec in terms of the restriction of the switching time. Chairman remarked that if this information from SA WG4 had already been reflected in RAN WG2 CR which was contained in R1-01-0362 then there would be nothing for us to worry about. Mr. Dirk Gerstenberger informed that the RAN WG2 could not see any difference among those restrictions and therefore the results had not been reflected in the RAN WG2 CR. Ms. Evelyne Le Strat (Nortel) pointed out that RAN WG2 CR does not include the requests from SA WG4. There is nothing on variable bit rate configuration. Chairman stated that this inconsistency will be clarified in the next RAN.

R1-01-0208 was answer LS from CN WG4 to SA WG4(S4-01022, above). This was noted. In R1-01-0362 RAN WG2 was asking to check their draft CR for the outstanding 6 default configurations which needs RAN WG1 guidance. In case there are needs to modify the values, RAN WG2 was requesting us for modifications and put the revision on the RAN WG2 e-mail reflector in advance to next RAN. Since Mr. Yannick Le Pezennec (Vodafone) had already done with this homework in **R1-01-0272**, it was reviewed in succession.

R1-01-0272 Proposed parameter values for 2G-3G handover preconfigurations Source : Vodafone Group, France Telecom, Telia

This paper proposed the values for the default preconfigurations requested by RAN WG2 LS (R1-01-0362). After presentation of this paper, chairman asked Mr. Yannick Le Pezennec to modify the draft RAN WG2 CR contained in R1-01-0362 using the values listed in this paper (R1-01-0272). Chairman encouraged the people to go to Mr. Yannick Le Pezennec if they want to do some modifications. Chairman also asked Mr. Yannick Le Pezennec to draft a LS to RAN WG2 which would contain the revised CR. This LS was drafted in **R1-01-0393**. It was reviewed on Day4 and approved in **R1-01-0421**. (See No. 160)

- (*26) Mr. Serge Willenegger (Qualcomm) presented this LS. This was an answer LS from RAN WG4 to RAN WG3 informing that RAN WG4 had not yet completed the work on the accuracy definitions for RTD and ATD measurements. We had already received relevant LS from RAN WG2 (R1-01-0319, R2-010745, See No. 20). RAN WG2 LS was bit more specific on this issue. Chairman concluded this was noted.
- (*27) The reviewal of this LS was postponed. Interdigital was preparing the relevant CR with this LS but during the meeting offline discussion was going on and conclusion was not reached.

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
31	015	1	25.223	R1-01-0020	Code Specific Phase Offsets for TDD	F	Siemens	Approved	No (*1) Comments Dayl 12:22
32	095	-	25.211	R1-01-0254	Phase Reference for Secondary CCPCH carrying FACH	F	Nokia	To be revised	(*2) Dayl 1446
33	093	-	25.211 Rel-4	R1-01-0217	Application of beamforming and combination of beamforming with TX- diversity on UTRA FDD downlink	F	Nokia	To be revised	(*3) Davi 1446
34	094	-	25.211	R1-01-0218	Clarification on PICH and S- CCPCH timing relation	F	CWTS/ Huawei	Rejected	(*4) Dayl 15:11
35	039	-	25.213	R1-01-0261	Clarification of the scrambling code of a power control preamble	F	Panasonic	To be revised	(*5) Davi 15:15
36	038	-	25.213	R1-01-0247	Clarification of channelization codes when SF=512	F	Siemens Panasonic	Approved	No (*6) Comments
37	156	-	25.214	R1-01-0282	Clarification of initialisation procedure	F	Philips	Approved	No (*7) Comments
38	148	-	25.214	R1-01-0108	Clarification of UE SIR estimation	F	Ericsson, Philips	To be revised	(*8)
39	155	-	25.214	R1-01-0279	Correction of Limited Power Raise	F	Ericsson	Approved	No Comments
40	161	-	25.214	R1-01-0327	Correction of the UE behaviour in SSDT mode	F	Vodafone	To be revised	(*9)
41	157	-	25.214	R1-01-0284	Power balancing algorithm accuracy description	F	Nokia	To be revised	(*10)
42	158	-	25.214	R1-01-0285	Definition of power control step size for algorithm 2	F	Nokia	Approved	No (*11) Comments
43	160	-	25.214	R1-01-0325	DL PC behaviour during UL out-of-sync	F	Nokia	To be revised LS to be sent	(*12)
44	150	-	25.214	R1-01-0262	Clarification of the order of SSDT signalling in 2 bit FBI	F	Panasonic	To be revised	(*13)
45	083	-	25.215	R1-01-0294	Correction of GPS Timing measurement	F	Ericsson	Approved	No Comments Dayl 17:05
46	046	-	25.221	R1-01-0265	Clarification of TFCI transmission	F	Siemens	Approved	No Comments Dayl 17:08
47	045	-	25.221	R1-01-0238	Corrections on the PRACH and clarifications on the midamble generation and the behaviour in case of an invalid TFI combination on the DCHs	F	Siemens	Approved but revised	(*14)
48	054	1	25.222	R1-01-0242	Corrections & Clarifications for TS25.222	F	Siemens	Approved (update)	No (*15) Comments
49	046	1	25.224	R1-01-0239	Corrections of TDD power control sections	F	Siemens	To be revised	(*16)
50	053	-	25.224	R1-01-0252	Known TFCI for the TDD Special Burst	F	InterDigital	Approved	No Comments
51	050	-	25.224	R1-01-0209	Use of a Special Burst in reconfiguration	F	InterDigital	Approved	No Comments
52	006	-	25.944	R1-01-0256	Corrections for TDD sections	F	Siemens	Approved	No Comments Dayl 17:40
53	096	-	25.211	R1-01-0278 R1-01-0359	Uplink power control preamble	F	Ericsson	Approved	(*17) Davi 15:04 and 18:05
54	154		25.214	R1-01-0278	Uplink power control preamble	F	Ericsson	To be revised	(*17)
55	-	-	-	R1-01-0328	Downlink channelization code phase (for discussion)	-	Panasonic	Offline discussion	(*18) Dav2 09:41-09:56
56	039	1	25.213	R1-01-0348	Clarification of the scrambling code of a power control preamble	F	Panasonic	Approved	No (*19) Comments Day2 17:54

4. Change Requests for WG1 Release –99 specifications

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
57	148	1	25.214	R1-01-0352	Clarification of UE SIR estimation	F	Ericsson Philips	Approved	No (*20) Comments Day2 17:56
58	150	1	25.214	R1-01-0357	Clarification of the order of SSDT signalling in 2 bit FBI	F	Panasonic	Approved	No (*21) Comments Day2 17:58
59	082	1	25.215	R1-01-0340	Correction of GSM reference	F	Panasonic	Approved	No (*22) Comments Day2 17:59
60	092	1	25.211	R1-01-0368	Clarification of the S-CCPCH frame carring paging information	F	Panasonic	Approved	No (*23) Comments Day2 18:03
61	104	1	25.212 Rel-4	R1-01-0390	Addition of compressed mode gap length "8 slots" (Rel4)	С	Nokia	Postponed →rejected	(*24) _{Day3 09:30}
62	161	1	25.214	R1-01-0353	Correction of the UE behaviour in SSDT mode	F	Vodafone Nokia	Approved	No (*25) Comments Day4 08:46
63	095	1	25.211	R1-01-0346	Phase Reference for Secondary CCPCH carrying FACH	F	Nokia	Approved	No (*26) Comments Day4 08:51
64	093	1	25.211 Rel-4	R1-01-0347	Application of beamforming and combination of beamforming with TX- diversity on UTRA FDD downlink	F	Nokia	Approved	No (*27) Comments Day4 08:57
65	033	2	25.221	R1-01-0350	Correction to SCH section	F	InterDigital	Approved	No Comments _{Day4} 09:01
66	048	-	25.221	R1-01-0341	Corrections to Table 5.b "Timeslot formats for the Uplink"	F	InterDigital Siemens	Approved	No Comments _{Day4} 09:03
67	045	1	25.221	R1-01-0379	Corrections on the PRACH and clarifications on the midamble generation and the behaviour in case of an invalid TFI combination on the DCHs	F	Siemens	Approved updates	No (*28) Comments _{Day4 09:05}
68	046	2	25.224	R1-01-0358	Corrections of TDD power control sections	F	Siemens	Approved	No (*29) Comments Day4 09:06
69	037	1	25.224	R1-01-0351	RACH random access procedure	F	InterDigital	Approved updates	No (*30) Comments Day4 09:09
70	154	1	25.214	R1-01-0359	Uplink power control preamble	F	Ericsson	Approved	No (*31) Comments Day4 10:49
71	ZZZ	-	25.213	R1-01-0399	Defining the code phase reference of downlink channelisation codes	F	Siemens	Not Approved	(*32) Day4 10:57
72	163	-	25.214	R1-01-0419	Correction on downlink synchronisation primitives	F	NTT DoCoMo	Approved	(*33) Day4 16:24
73	086	-	25.215	R1-01-0419	Correction on transport channel BLER	F	NTT DoCoMo	Approved	(*33) _{Day4 16:42}

(*1) This CR had been postponed from RAN WG1#18 meeting. No revision had been done from RAN WG#18. Mr. Marcus Purat (Siemens) presented this CR.

This CR proposed to apply code specific phase offset of pi/2 in order to solve the potential problem of high peak to average power ratios that may occur if the same data is transmitted on all or at least some downlink physical channels within one slot. This issue had been discussed in RAN WG1#17 in Stockholm. In the discussion in RAN WG1#17, 3 main concerns were raised on the usage of code specific phase offsets for the uplink. The paper presented answers for those questions and proposed to use Code Specific Phase Offsets of pi/2 both for the UL and the DL.

/*** Day1 Lunch break 12:24 -14:01 ***/

(*2) Mr. Markku Tarkiainen (Nokia) presented this CR.

Some concerns were raised that the rationale for removing the option of using S-CCPCH carrying FACH together with S-CPICH as phase reference is not clear.

A bit long discussion took place. The main discussion point was whether we should keep the option that release 99 or release 4 UE should support Secondary CPICH as a phase reference for S-CCPCH carrying FACH only.

Finally it was concluded that we should keep the possibility for the use of S-CPICH as phase reference for the S-CCPCH carrying FACH only for future use and consequently the changes of this CR other than the modification in the very last line were not agreed. This was to be revised. The revision was presented in **R1-01-0346** and approved on Day 4. (See No.63)

(*3) Although this is the CR for release 4 specification, this is directly linked with the above CR (CR 25.211-095) and

Having received a liaison statement from RAN WG4 on *Amendments to application of beam forming in release 4* (**R1-01-0199**, See No. 10) Nokia provided these 2 CRs, one for release 99 specification (R1-01-0254) and one for release 4 specification (R1-01-0217).

In R1-01-0254 (CR 25.211-095), it was proposed to remove the option of having Secondary CPICH or no CPICH at all as a phase reference for S-CCPCH carrying FACH only.

therefore was discussed in succession.

Some questions were made.

- Is it clear what is meant by the word "beamforming" ? Is there any explicit definition of this ?
 - → It would be defined what kind of beamforming the UE needs to cope with in the form of test cases in RAN WG4 specifications for release 4. (although this needs to be checked). This is somewhat similar to the "out of sync" case in which there is no explicit definition but it is actually defined by the test cases in RAN WG4 specifications. (Chairman answered.)
- Though table 11 has 2 columns they are identical. What are these 2 columns for ?
 - → 2 columns are needed if beamforming is allowed for S-CCPCH with FACH only. We need probably to add one row and modify 2 rows with respect to S-CCPCH channel type of table 11. One is for S-CCPCH carrying FACH only and the other is S-CCPCH carrying PCH. The CR had been drafted with anticipation for some possible changes in mind. Similar modification is also needed to table 12. → To be revised.
- Could this be in inforamtive annex? → It would be a bit funny to have this in informative annex. (Chairman) Regarding this, there was one concesern raised that there could be a confusion if we treat beamforming and closed loop transmission techniques at the same time because these are 2 different schemes and issue of beamforming is not yet closed.

 \rightarrow Chairman suggested offline discussion on this.

According to the comments received this was revised into **R1-01-0347** and the revision was approved with no comments on Day4. (See No. 64)

Chairman remarked that he would present the outcome of these discussions in his report to RAN. We would not send answer LS to RAN WG4 because any particular answer was not requested in the LS from RAN WG4.

(*4) Mr. Guiliang Yang (CWTS) presented this CR

This CR proposed to modify the figure 29 *Radio frame timing and access slot timing of downlink physical channels* because the current figure is not necessary clear.

Mr. Dirk Gerstenberger (Ericsson) remarked that there seems to be misunderstanding of the figure 29 and text. He explained that the intention of the figure 29 is not to show the relation of the contents but to show the timing of downlink physical channels relative to the P-CCPCH. He added that the current figure is completely correct and should not be changed.

- Chairman agreed with this remark and concluded that this CR was rejected.
- (*5) Mr. Hidetoshi Suzuki(Panasonic) presented this CR.

This CR proposed to removed the description of alignment of power control preamble because now PCP length is defined by the number of frames.

Mr. Dirk Gerstenberger (Ericsson) made a comment that the whole paragraph should be removed saying that it is no use to keep the middle sentence. Mr. Hidetoshi Suzuki answered that there had been a comment on the reflector that the middle sentence should be kept.

Since no one in the meeting opposed to remove the middle sentence, it was agreed to remove whole paragraph. The revision was made into **R1-01-0348** and approved with no comments on Day 2. (See No.56)

- (*6) Mr. Peter Chambers (Siemens) presented this CR.
- This was a clarification type CR and approved without any comments.
- (*7) Mr. Tim Moulsley (Philips) presented this CR.

This CR proposed to provide clarification to the initialisation procedure by adding one sentence to the description of the criteria for reporting synchronisation status. There had been some discussion on the e-mail reflector which indicated that the current text in TS 25.214 section 4.3.1.2 describing the reporting of "in-sync" during radio link establishment could be misunderstood because it is not clear when the first phase begins although it is stated when it ends. The sentence "The first phase *starts when higher layers initiate physical dedicated channel establishment (as described in [5]) and lasts*" was added. This is consistent with TS 25.331.

(*8) Mr. Dirk Gerstenberger (Ericsson) presented this CR.

In RAN WG1#18 a CR (**R1-01-0071**, CR 25.215-081, Ericsson) which proposed to remove the SIR measurement from the UE measurements in TS 25.215 because SIR measurement by UE is a physical layer internal measurement and is not reported by UE to UTRAN was approved. There was a concern raised by Mr. Matthew Baker (Philips) which said that deleting SIR measurement itself would not be a problem but somewhere in the specifications there should be retained the definition of SIR target or the information regarding SIR measurement, something like (RSCP/ISCP)x(SF/2) because otherwise there would be confusion in downlink power control with UEs having different definition of SIR targets. Chairman agreed with this comment and concluded that the CR 25.215-081 was approved on condition that another CR which includes above SIR measurement information should be submitted to RAN with CR 25.215-081.

The current CR is proposed as this companion CR and proposed to add clarification to informative annex B.2. It was proposed to clarify that UE internal SIR estimation for inner loop power control shall be done excluding the SF.

It was remarked that although this is an addition to the informative annex, the description of " *the spreading factor shall not be considered in the SIR estimation* " gives an impression that it is something mandatory. Chairman suggested offline discussion for rewording of the very last sentece of this CR.

Finally this was revised into R1-01-0352. It was reviewd on Day 2 and approved. (See No. 57)

/*** Day1 Coffee break 15:35 -16:09 ***/

(*9) Mr. Yannick Le Pezennec (Vodafone) presented this CR.

Regarding the UE behaviour in SSDT mode there is only an example of potential implementation given in the informative annex in the current specification and therefore UE could derive the uplink TPC commands in

different ways. This CR proposed to move that example in annex to the section describing the derivation of the TPC procedure so that the implementation can be done more uniform manner.

Chairman briefly explained the background of the specification (why it has been put in informative annex.). In the RAN WG1#15 meeting in Berlin, NEC proposed to specify that UE should measure downlink reception quality only on the primary cell signal in SSDT mode in the very last minutes of the meeting (CR 25.214-128, **R1-00-1136**). Though this had been the basic assumption of SSDT and had been considered from the beginning of the proposal of SSDT it had been missing in the specification. There were several concern raised to that late introduction of the assumption. The test cases for SSDT in RAN WG4 are without power controls and there is no test cases on how this should operate. NEC provided the revision of the CR(CR 25.214-128r1, **R1-00-1126**) in RAN WG1#16 meeting in Pusan, taking into account the situation of that point of time and introduced the procedure of how to derive TPC commands into informative annex. But in any case, RAN WG4 specification will not test the SSDT behaviour together with power control activated in release 99 and release 4. Mr. Tim Moulsley (Philips) pointed out that the current proposal is insufficient and without moving whole informative annex (B.2) to the mandatory part it would not achieve significant change because proposed text does not say anything about what should be done with SIR_{est} and this is subject to the informative annex.

Chairman stated that even if we specify the behaviour in our specifications it is difficult to expect uniformed UE behaviour if we do not have any performance test cases. We need to have test cases.

Chairman suggested that we should keep the annex as it is. He added that he would discuss with RAN WG4 chairman in the next RAN on whether RAN WG4 would do something on SSDT with power control activated during this year.

Mr. Yannick Le Pezennec asked whether we can have general statement in 5.2.1.4.2 saying that the generation of TPC commands are based on the primary cell only. Chairman agreed to this proposal.

This was so revised in **R1-01-0353**. The revision was reviewed on Day 4 and approved. (See No. 62) (*10) Mr. Markku Tarkiainen (Nokia) presented this CR.

This CR is based on the LS from RAN WG4 (R1-01-0197, See No.8)

Although we had agreed to remove the description of the power-balancing alogorithm from TS 25.214 from the informative annex in CR 25.214-144 (**R1-01-0052**) in RAN WG1#18 in Boston, we received the LS from RAN WG4 which is requesting us to introduce an accuracy definition for P_{bal} to TS25.214 and define it with respect to power control step size Δ TPC. They provided us with a text proposal. This CR proposed to incorporate this text proposal to TS 25.214. This does not contradict with CR 25.214-144 because RANWG3 had not removed everything but removed the accuracy definition only.

Mr. Dirk Gerstenberger (Ericsson) remarked that before approving this CR we need to check the motivation of this change with RAN WG4, what had been discussed in RANWG4. He added that the formula needs to be revised.

Chaiman agreed with the comment. Modification was needed to the formula. So this was to be revised. Chairman invited people to check the motivation with RAN WG4 before we come back to this issue. On Day4, Mr. Markku Tarkiainen announced that Nokia would like to postpone this issue to the next meeting.

(*11) Mr. Markku Tarkiainen (Nokia) presented this CR.

Currently in the power control step size is signalled for power control algorithm 1 only but not for algorithm 2. The power control step size for algorithm 2 needs to be specified and there are 2 ways of doing this. One is to be signalled by higher layer parameter and other is to fix it as 1 dB. This CR propsed to sepcify in section 5.1.2.2.1 that power control step size for algorithm 2 is always 1dB.

There were small discussion on why currently the power control step size for algorithm2 is not specified in RRC. It seems that that it had been just simply being missed out.

- This CR was approved with no comment.
- (*12) Mr. Markku Tarkiainen (Nokia) presented this CR.

Currently there is no description about how Node B should set its transmission power in case uplink is in out-ofsync state in Node B, that is, in case no TPC commands are received in the uplink.

This CR proposed adding a description on the layer1 behaviour of Node B in TS 25.214. In order to facilitate the UE TPC command generation during the UL out-of-sync, an IE "UL TPC pattern 01 count" is proposed to be added to the NBAP signalling.

There were several comments.

- Is this talking about the case of uplink out-of-sync or the case where Node B has not yet obtained uplink synchronization (Initial state)? \rightarrow This applies out-of-sync case only. \leftarrow Then this needs to be revised because there is a sentence that says that "*Node Bs that have not yet achieved uplink synchronisation shall follow...*" and this is misleading.

- Title of this added section, "<u>*TPC command generation on uplink during the period of out-of synchronization*" is quite confusing. Is this talking about uplink or downlink? The behaviour of UE? or Node B? It should be clarified that this is Node B power settings when uplink is out-of-sync.</u>

- We need to consider whether this is really needed or not ?

- This is something for release 4 rather than for release 99. Is this essential for release 99?

- Before having this CR, we should ask to RAN WG3 whether this needs to be specified or not. - Second last sentence should be removed.

Conclusion : LS is to be sent to RAN WG3 inquiring whether there is a need for RAN WG1 to define a specific Node B transmit power setting for the case of UL out-of-sync state.

R1-01-0356 was allocated for the LS. This LS was reviewed on Day4 and approved into **R1-01-0431**. (See No. 164)

(*13) Mr. Hidetoshi Suzuki (Panasonic) presented this CR.

This CR proposed to clarify how the ID code bits should be transmitted in 2bit FBI case (Table 4) The intention was agreed but rewording was suggested. This was revised in **R1-01-0357** and approved in Day 2. (See No. 58)

- (*14) Mr. Stephen Dick (InterDigital) requested offline checking. Chairman proposed that we approve the CR at this point of time but if some problem is identified by Day4, the revision shall be done. Eventually after offline discussion this CR was revised in terms of editorial point in **R1-01-0379** and approved on Day 4.(See No. 67)
- (*15) Mr. Marcus Purat (Siemens) presented this CR. This was the revision of already approved CR. (CR 25.222-054, R1-01-0023, approved in RAN WG1#18) In the original CR the order of the physical channel mapping was clarified with the reference to the RRC specification. After it was approved, Siemens received a comment saying that the proposal was not necessary good way to describe it because this order is not only for UE but also the same order is to be applied to Node B. So Siemens revised the original approved CR to define physical channel order. The new change was added only in section 4.2.11.
- (*16) This was the revision of already approved CR. (CR 25.224-046, **R1-01-0017**, approved in RAN WG1#18) There was one comment on new annex A.1 that the word "may" should be replaced by "should" in the following paragraph.

"The power control may be realized by two cascaded control loops. The outer loop controls the transmission quality, whose reference value is set by higher layers [15], by providing the reference value for the inner loop. This reference value **may** be the SIR at the UE [15]. The inner loop controls the physical quantity for which the outer loop produces the reference value (e. g. the SIR) by generating TPC commands. This may be done by comparing the measured SIR to its reference value."

There was another comment saying that some rewording might be needed.

Chairman suggested offline discussion about the rewording including above "may", "should" issue. Eventually this was reviewed into **R1-01-0358** in which "may" was replaced by "should". This was approved on Day4. (See No.68)

(*17) Mr. Dirk Gerstenberger (Ericsson) presented this CR.

This is a kind of follow-up CR for the discussion RAN WG2 had week before. (See LS **R1-01-0316**, No. 14) RAN WG2 made decision to extend the power control preamble length to a maximum 7 frames as requested by RAN WG1. (See **R1-00-1293**, **R1-00-1413**, **R1-00-1491**) Further in order to handle the potential loss of complete messages, RAN WG2 introduced a signalling radio bearer (SRB) delay applied during the first frames after the PCP. During the discussion in RAN WG2, one problem was identified that if the UE is configured to use a TTI > 10ms, TTI boundary must be reached before the first data transmission and this will cause in the worst case an additional period of up to 7 frames.

As a solution of this problem this CR proposed to align the end of the uplink PCP (start of SRB delay) with the start of DPDCH transmission and to clarify that during uplink PCP no DPDCH transmission is done independent of the selected TFCI value.

CR for TS 25.211 was approved with no comments.

Some discussion was made on the CR for TS 25.214 part on following sentence in section 4.3.2.2 whether we need to clarify that this is the case where there is data to be transmitted.

The transmission of the uplink DPCCH power control preamble shall start Npcp radio frames prior to the start of the uplink DPDCH transmission,...

After some discussion, chairman suggested offline discussion on this issue. Eventually this was revised in **R1-01-0359**. The phrase "*if any data is to be transmitted*" was added to the above sentence. The revision was reviewed and approved on Day4. (See No. 70)

/** This was further revised in RP-010224 during the RAN #11 **/

(*18) Mr. Hidetoshi Suzuki presented this discussion paper.

This paper discussed that there are 2 possible ways of understanding of the downlink channelisation code phase with respect to the phase alignment to the channel in case of SF=512, that is, whether the channelisation code is to be aligned to CPICH or to DPCH frame timing. This paper also proposed one possible modification to TS 25.213 which may reduce the hardware complexity irrespective of the understandings.

Chairman remarked that we need some kind of picture for the people to understand what the actual problem is. He added that we need to understand whethere there are rearly 2 kind of different understandings.

Mr. Peter Chambers (Siemens) proposed offline discussion on this issue until next meeting. Chairman agreed with this proposal.

- (*19) This is the revision of **R1-01-0261** which was reviewed on Day1.(See No. 35) The whole last paragrah in section 4.3.2.4 was removed in accordance with the discussion on Day1.
- (*20) This is the revision of **R1-01-0108** which was reviewed on Day1.(See No. 38) The last sentence was slightly modified according to the outcome of the offline discussion.
- (*21) This is the revision of **R1-01-0262** which was reviewed on Day1. (See No.44) The sentence was reworded for clarification.

(*22) Mr. Hidetoshi Suzuki (Panasonic) presented this CR.

- This CR proposed to change the reference document in section 2 [20] from "GSM03.03" to "TS 25.133" For consistency reason chairman asked people to check whether TDD verision does also need this modification.
- (*23) Mr. Hidetoshi Suzuki (Panasonic) presented this CR. This is the revision of R1-01-0056 which was reviewed and rejected in RAN WG1#18 meeting. Now that the confirmation has been received from RAN WG2 in the LS **R1-01-0315** (R2-010741) (See No. 17), Panasonic prepared the slightly revised version of R1-01-0056.

(*24) Mr. Ville Steudle (Nokia) presented this CR.

This CR was proposing the addition of compressed mode gap length of "8 slots" in TS 25.212. Originally this CR had been presented in RAN WG1#18 meeting. For the background, See No.11. Now it was proposed for release 4. In RAN WG4, the benefit of this introduction was agreed but they decided not to introduce this for release 99. It has not yet discussed in RAN WG4 for release 4 because they are still busy for release 99 issues.

Mr. Dirk Gerstenberger (Ericsson) remarked that looking the LS (**R1-01-0200**, R4-010223) from RAN WG4, it is clearly stated that RAN WG4 has not reached any conclusion whether this is useful or not. He added as an information from RAN WG4 colleagues that even if we do not use TGL=8, similar performance can be achieved using existing TGL value of 10.

Ms. Sarah Boumendil (Nortel) supplemented that although RAN WG4 evaluates that similar performance can be achieved by TGL=10, TGL=8 is worth considering for total performance.

Mr. Dirk Gerstenberger proposed to postpone the decision by Day4. He would try to get information from RAN WG4 by that time.

On Day4, Mr. Dirk Gerstenberger stated that according to the information he got there was no convincing argumentation for the benefit of TGL=8 and no conclusion was reached in RAN WG4. He added that we should not be too fast in introducing this.

Mr. Ville Steudle agreed to this comment and state that although even if we see some advantage it seems that some parties has not yet convinced and therefore we need to provide some more simulation results and justification for this. Consequently he proposed to postpone this.

Having this comment, chairman concluded that this CR is rejected in this meeting.

- (*25) Mr. Yannick Le Pezennec (Vodafone) presented this CR. This is a revision of R1-01-0327 which was reviewed on Day1. (See No. 40) Following the discussion, in this revision only one sentence saying "based on the downlink signals from the primary cell only" was added to section 5.2.1.4.2 and annex was kept as it had been.
- (*26) Mr. Markku Tarkiainen (Nokia) presented this CR. This is the revision of **R1-01-0254** which was reviewed on Day1. (See No. 32) Following the discussion, the very last line of the original CR had been kept in this revision.
- (*27) Mr. Markku Tarkiainen (Nokia) presented this CR.
- This is the revision of **R1-01-0217** which was reviewed on Day1. (See No. 33)
- (*28) This is the revision of R1-01-0238 which was approved on Day1. (See No. 47)
- (*29) This is the revision of **R1-01-0239** which was reviewed on Day1. (See No. 49) After offline discussion, the word "may" was replaced by "should" in Annex A.1.
- (*30) Ms. Liliana Czapla (InterDigital) presented this CR. This is the revision of CR (CR 25.224-037, R1-01-0073) which was approved in RAN WG1#18. After the approval in RAN WG1#18, it was pointed out the proposed text for PRACH was a bit misleading. In this revision it was clarified that a PRACH is defined by a timeslot and a channelization code, which is randomly selected from the PRACH Channelisation Code List (TS 25.331) signaled by higher layers.
- (*31) Mr. Dirk Gerstenberger (Ericsson) presented this CR. This is the revision of R1-01-0278 which was reviewed on Day1. (See No. 54) CR 25.211-096 part was untouched. CR 25.214-154 part was revised to reflect the comment received.
- (*32) Mr. Peter Chambers (Siemens) presented this draft CR.
- This paper contained 2 possible versions of draft CR to define the code phase for the channelization code in case SF=512. It is open if the code phase reference is the CPICH frame boundary or the DPCH (or other) frame boundary and this CR was trying to fix this. This CR seems to have its base on **R1-01-0328**. (See No. 55) There were a couple of comments saying that the current specification is not unclear. From section 5.1 we can understand that scrambling is to be done on the symbol basis, that is DPCH frame boundary. Having these comments chairman concluded that for the timing there is no CR needed on this issue.
- (*33) Mr. Yukihiko Okumura (NTT DoCoMo) presented these 2 CRs.

The current description of "Downlink synchronisation primitives" in TS25.214 and "Transport channel BLER" in TS25.215 still have some ambiguities in case of blind transport format detection i.e. no TFCI used. If there is a transport channel, which includes a transport format with zero transport blocks, this transport channel should be excluded from the criterion of the downlink synchronisation primitives and from measurement of transport channel BLER because no CRC is attached on the zero transport blocks.

There was a rather long discussion took place.

CR 25.214-163 :

It was pointed out that the in TS 34.108 we have some cases which are inconsistent with this proposal. e.g. there is stand alone DCCH where there is no TFCI and there is transport format zero block. Since there were no objection raised to this clarification, chairman concluded this approved.

However he remarked that proponent should confirm with their T colleagues that there is no problem with their specification by adding this sentence to our specification.

CR 25.215-086 : There were no objection raised for this CR but there took place long discussion on whether we need this clarification or not. Chairman remarked as his personal opinion that it is a bit funny to put this kind of clarifications into measurement definition place.

Finally it was approved but chairman added that if anybody found problem especially in terms of consistency then put this on-hold in the RAN plenary meeting.

Mr. Dirk Gerstenberger (Ericsson) remarked that it would be useful to have some kind of CR for the next meeting in order to clarify this in terms of BTFD.

5. Report from TSG RAN Ad Hoc on UTRAN Evolution (Day1 18:55 - 18:56)

Chairman presented one slide on the screen.

Work shop took place on Feb. 5 and 6 in Helsinki.

Certain architecture studies were identified during the work shop. They do not have any impact on the radio interface. Discussion are taking place on the e-mail reflector. In the next RAN it will be discussed how to proceed with these issues.

6. Election of the officials

6.1 Position for Chairmanship

Mr. Antti Toskala (Nokia) was elected as chairman of RAN WG1 for the next term. (Dayl 18:57) (There was no other candidate hence no voting took place.)

6.2 Positions for Vice chairmanship

There were following 3 candidates announced candidacies for the 2 positions of vice chairman.

Mr. Hyeon Woo Lee (Samsung)

Mr. Masafumi Usuda (NTT DoCoMo)

Mr. Alex Lax (3G.com UK)

Votings took place on Day3 and

Mr. Masafumi Usuda (NTT DoCoMo) (elected by 1st voting) Mr. Hyeon Woo Lee (Samsung) (elected by 2nd voting)

were elected.

7. Ad Hoc 21 session (Day1 night session)

7.1 Report from Ad Hoc #21: 1.28 Mcps TDD (**R1-01-0367**) (Day2 17:18-17:26)

Mr. Marcus Purat (Siemens, Ad Hoc 21 chairman) presented this report.

As a conclusion of discussion, Ad Hoc 21 was recommending to RAN WG1 the approval of following CR for 1.28Mcps TDD.

- TS25.201 (updated version in **R1-01-0377**)
- TS25.221 (updated version in R1-01-0371)
- TS25.222 (updated version in R1-01-0372)
- TS25.223 (updated version in R1-01-0373)
- TS25.224 (updated version in R1-01-0374)
- TS25.225 (updated version in R1-01-0375)
- TR25.944 (no update necessary, R1-01-0255)

One text proposal to working CR (**R1-01-0369**) for TS 25.224 was updated to reflect the discussion. This was remaining to be approved in the plenary. This CR was reviewed right after the Ad Hoc report. (See 7.2)

Ad Hoc 21 also recommended the approval of TR25.928 on 1.28 Mcps TDD (**R1-01-0376**) as version 2.0.0 for RAN submission.

Chairman proposed to review all the above CRs on Day4 and encouraged people to prepare those CRs by Day3. All 1.28Mcps related CRs were approved on Day4 (See 8.8) The Ad Hee 21 report was approved with no comments.

The Ad Hoc 21 report was approved with no comments.

7.2 Approval of remaining text proposal to working CR

Uplink Synchronisation Procedure (**R1-01-0369**) (17:28-17:31)

This was the revision of R1-01-0223.

There was one comment on terminology. In section 5.2.1.2, the term "normal" time-slot is used. It was discussed in RAN WG1#15 that the term "normal" should rather be used however on the other hand there is a request that terminology should be aligned with 3.84Mcps TDD where the term "traffic" is used.

Chairman suggested to use the same terminology as 3.84Mcps in order to avoid confusion. For section 5.2.1.2, "normal" should be replaced by "traffic" in transplantation process to the TR.

(Day1 19:40-21:30)

Day 2, started at 09.10

8. Release 4/5 issues

Ad Hoc configuration

- AH21 : TDD 1.28 Mchips functionality
- AH22 : Terminal power saving features
- AH23 : Compressed mode
- AH24 : High speed downlink packet access
- AH25 : Hybrid ARQ
- AH26 : Tx-diversity

AH27 : Radio link performance enhancements

- AH28 : Improved Common DL Channel for Cell FACH State
- AH29 : Positioning
- AH30 : TDD NodeB synchronisation

AH31 : Uplink Synchronous Transmission

AH32 : DSCH Power Control Improvement in soft handover

No.	CR	rev.	TS/TR	Tdoc	Title	Cat	Source	Conclusion	Notes
74	001	-	25.836	R1-01-0137	Additions to the node B synchronisation procedure	С	Siemens	offline discussion	(*1) Day2 09:58-10:07
75	042	1	25.221	R1-01-0241	Introduction of the Physical Node B Synchronization Channel	В	Siemens	Approved but revised	No (*2) Comments Day2 10:07-10:08
76	044	1	25.224	R1-01-0243	Layer 1 procedure for Node B synchronisation	В	Siemens	Approved but revised	No (*2) Comments Day2 10:08-10:11
77	016	-	25.223	R1-01-0202	Cell synchronisation codes for R'4 Node B sync over air interface in UTRA TDD	В	Mitsubishi	Approved	No (*2) Comments Day2 10:12-10:15
78	022	-	25.225	R1-01-0013	Measurements for Node B synchronisation	В	Siemens	Approved	No (*2) Comments Day2 10:15-10:15
79	042	2	25.221	R1-01-0381	Introduction of the Physical Node B Synchronization Channel	В	Siemens	Approved updates	No (*3) Comments _{Day4 09:12}
80	001	1	25.836	R1-01-0382	Additions to the node B synchronisation procedure	С	Siemens	Approved	No (*3) Comments _{Day4 09:14}
81	044	2	25.224	R1-01-0383	Layer 1 procedure for Node B synchronisation	В	Siemens	Approved	No (*4) Comments _{Day4 09:16}

8.1 TDD Node B sync situation (Ad Hoc 30)	Work Item Code : <i>RANimp-NBsync</i>
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(*1) This is a CR for the TR 25.836 v4.0.0.

Mr. Stefan Oestreich (Siemens) presented this CR. This CR proposed to introduce an additional procedure in order to support frequency acquisition. With current procedure as it is Node B should have quite accurate clock built in but it is wished for manufacturer also for the operator that Node B or Cell can operate with clock with less accuracy. And for this clock with less accuracy it is quite straightforward to introduce this frequency acquisition procedure in addition to Node B synchronization procedure so that this less accurate clock can obtain frequency synchronization.

Mr. Stephen Dick (InterDigital) remarked that all this procedure should be optional. He added that other WG (RAN WG3) CR would be needed to support this CR. Finally he proposed rewording of this CR in the offline discussion.

Mr. Stefan Oestreich answered that in fact RAN WG3 specifications needs to be modified. He stated that the plan is first to introduce this to the TR and then to introduce CRs to the specifications. Chairman suggested offline discussion.

(*2) All these CRs are in line with the TR and they had been presented in RAWG1 #18 already as well. These were approved with no comments.

CR 25.225-022 (R1-01-0013) was approved without reviewal because it had been already approved in principle in RAN WG1#18 and no comments made so far.

But CR 25.221-042r1(**R1-01-0241**) and CR 25.224-044r1(**R1-01-0243**) were revised on Day4. (See No. 79 and 81)

Having all these CRs approved (although one CR for TR is still pending), chairman stated that we can close this work item at least form physical layer point of view.

(*3) Mr. Stefan Oestreich (Siemens) presented this CR. This CR is update of already approved CR (CR 25.221-042r1,

R1-01-0241, See No. 75). The first sentence in section 5.3.8 was changed from

"In case of Node B synchronisation via the air interface the PNBSCH shall be used...." to

"In case cell sync bursts are used for Node B synchronisation the PNBSCH shall be used...."

because there was a comment which says that the synchronization via the air interface might not necessary mean the use of cell sync burst.

- (*4) Mr. Stefan Oestreich (Siemens) presented this CR. This is the revision of **R1-01-0137** which was reviewed on Day2 (See No. 74) After offline discussion, some more or less editorial modification has been done for clarification.
- (*5) Mr. Stefan Oestreich (Siemens) presented this CR. This CR is update of already approved CR (CR 25.224-044r1, R1-01-0243, See No. 76) Newly "Frequency Acquisition Phase" was introduced in section 4.9.1 in accordance with the CR 25.836-001r1 (R1-01-0382).

8.2 DSCH Power Control Improvement in soft handover (Ad Hoc 32)

Work Item Code : *RInImp-DSCHsho*

No.	CR	rev.	TS/TR	Tdoc	Title	Cat	Source	Conclusion	Notes
82	001	-	25.841	R1-01-0246	TFCI power control for DSCH in split mode (Release 5)	В	LGE	To be revised	(*1) Day2 10:25-10:41
83	149	-	25.214	R1-01-0216	DSCH Power Control Improvement in soft handover	В	Nokia	Approved but revised	(*2) Day2 11:24-11:35
84	001	1	25.841	R1-01-0380	TFCI power control for DSCH in split mode	В	LGE	Approved	No (*3) Comments _{Day4 09:28}
85	149	1	25.214	R1-01-0414	DSCH Power Control Improvement in soft handover	В	Nokia	Approved updates	(*2) Day4 16:11-16:15

(*1) The concept of this proposal had been presented in RAN WG1#17 meeting in **R1-00-01429**. Further continuous document was presented in RAN WG1#18 in **R1-01-0125**. In the discussion in RAN WG1#18 it was concluded that this should not be included at least in release 4 because the actual (concrete) benefits of this scheme had not been clarified and no support was obtained from the floor except proponents. Chairman concluded we should treat this as a possible proposal for release 5 in RAN WG1#18.

Having this conclusion LGE provided this CR for the TR 25.841 for release 5.

Ms. Evelyne Le Strat (Nortel) remarked that if we approve this CR at RAN then it would trigger the creation of release 5 version of the TR without having corresponding work item.

Chairman agreed with this comment and stated that probably proponents made mistake because this CR should be CR for release 4 TR. There is no TR for release 5 on this topic. Intention was to have this scheme as a possible proposal for release 5 or beyond release 4 and in order for that the text should be made under the section 6.2 *Other Solutions* in the context of beyond release 4. Therefore no new section as done in this CR should be created. Chairman added that the current text proposal is too detail and it should be revised so that the level of description should be in line with other solutions in section 6.2. The description should be brief at this stage.

Chairman suggested offline discussion in drafting the revision among interested parties. The revision was made in **R1-01-0380** and approved on Day4. (See No. 84)

(*2) Mr. Markku Tarkiainen (Nokia) presented this CR.

This is a CR for inclusion of DSCH power control improvement in soft handover to TS 25.214 release 4 and is in line with the TR 25.841.

Ms. Sarah Boumendil (Nortel) questioned on section 5.2.1.4.1 what is meant by "*In case SSDT is used in the uplink direction only*,...". It should be both direction at the same time.

Chairman answered that there is RAN WG2 CR that allows to tell the UE whether the SSDT is assumed in release 99 or it is only sending SSDT signalling on the uplink but the downlink is transmitted as without SSDT(Release 4). This CR was approved without other comment. Chairman encourage the proponent to check the consistency with RAN WG3 TR/CR since they were having meeting in parallel with us.

This CR was revised on Day4. (See No. 85)

(*3) This is the revision of **R1-01-0246** which was reviewed on Day2. (See No. 82) Following the discussion on Day2, now the description of "TFCI Power control for DSCH in split mode" was put in section 6.2.3 briefly.

(*4) Mr. Markku Tarkiainen (Nokia) presented this CR.

This is a revision of **R1-01-0216** which was approved on Day2. In RAN WG3 it was concluded that in case that the Node B is a primary one, a power offset given for the primary case is rather subtracted from the power value for the PDSCH frame for the given UE. This revision was done to reflect this RAN WG3 conclusion in section 5.2.2.

^{/**} Day2 coffee break 10:43-11:20 **/

No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
86	-	-	-	R1-01-0228	Clarifications about power control and cell search related to idle periods for UTRA TDD	-	Siemens	Agreed LS to be sent	No (*1) Comments Day2 12:26-12:33
87	044	-	25.221	R1-01-0226	Correction of beacon characteristics due to IPDLs	С	Siemens	Approved	No Comments _{Day2 12:34}
88	048	-	25.224	R1-01-0227	Idle periods for IPDL location method	В	Siemens	To be revised	(*2) Day2 12:35-12:38
89	025	-	25.225	R1-01-0229	RTD measurement in UTRAN for UP-TDD	В	Siemens	Approved	No (*3) Comments Day2 14:13-14:18
90	048	1	25.224	R1-01-0389	Idle periods for IPDL location method	В	Siemens	Approved	No (*4) Comments Day4 09:24
91	085	-	25.215	R1-01-0411	RTD measurement in UTRAN for FDD	В	Nokia	Approved	No (*5) Comments Day4 16:11

8.3 Positioning (Ad Hoc 29) Work Item Code : LCS1-UEpos-enh

(*1) Mr. Siegfried Bär (Siemens) presented this document.

This paper provided the answers to the concerns raised in RAN WG1#18 meeting regarding proposed IPDL scheme. Mr. Siegfried Bär proposed to send LS to inform that the solutions were found to the concerns raised in RAN WG1#18. (Those concerns had been informed to RAN WG2 in the LS **R1-01-0174**). Chaine are and with this proposed **P1** (0.299) was allocated for the LS **L**S. IS used and and are the solution of the solution.

Chairman agreed with this proposal. **R1-01-0388** was allocated for the LS. LS was reviewed on Day4 and approved in **R1-01-0415**. (See No.159)

(*2) Mr. Mirko Aksentijevic (Nokia) remarked that the following sentence in section 5.1 should be reworded. During idle periods all channels are silent simultaneously, except for the SCH. Chairman suggested offline discussion for rewording.

This was revised into R1-01-0389 and approved on Day4. (See No. 90)

/** Lunch break 12:39-14:10 **/

(*3) Mr. Siegfried Bär (Siemens) presented this CR.

This CR proposed to introduce "SFN-SFN observed time difference" to the UTRAN measurement in order to support RTD measurement and to be in line with 25.305 *Stage 2 Functional Specification of UE Positioning* in UTRAN, v3.4.0.

The inclusion of RTD measurement was originally proposed by Nokia in RAN WG1#18 meeting in **R1-01-0064**. LS **R1-01-0147** had been sent to RAN WG2 to ask their view on this proposal. On Day1 we received answer LS from RAN WG2 (**R1-01-0319**, See No.20) in which RAN WG2 was answering that the proposal of inclusion of RTD measurement is in line with their expectation.

Mr. Siegfried Bär remarked that we should liaise with RAN WG2, RAN WG3 and RAN WG4 to inform them that RAN WG1 agreed to include RTD measurement not only in FDD but also TDD.

Chairman answered that he would report this in his report to RAN and it would be sufficient.

FDD version of this CR was presented by Nokia in **R1-01-0411** on Day4. (See No. 91)

(*4) Mr. Siegfried Bär (Siemens) presented this CR.

This is the revision of **R1-01-0227** which was reviewed on Day 2. (See No.88) After offline discussion the sentence in question was changed from

"During idle periods all channels are silent simultaneously, except for the SCH." to

- "During idle periods only the SCH is transmitted."
- and another editorial correction had been done.

(*5) Mr. Ville Steudle (Nokia) presented this CR. This is the TDD version of R1-01-0229. (See No. 89)

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
92	22	R1-01-0349	Modification of SSDT Operation to Support Gated DPCCH Transmission in Soft Handover Region with SSDT Activated	Samsung Nokia	Noted	(*1) Day2 14:19-14:56
93	22	R1-01-0283	Revision of TR25.840 Terminal Power Saving Features introducing UE capability with DPCCH gating	Nokia	Noted	(*2) Day2 14:56-15:06
94	22	R1-01-0336	Further clarifications to outer loop power control during DPCCH gating	Nokia Samsung	Noted	(*3) Day2 15:08-15:28
95	22	R1-01-0280	Text proposal for gating during compressed mode	Philips	Agreed in principle	(*4) Day2 15:28-15:49
96	22	R1-01-0296	Revision of TR25.840 "Terminal Power Saving Features" v2.2.0	Samsung	Approved	(*5) Day2 17:36-17:50
97	22	R1-01-0395	Revision of TR25.840 "Terminal Power Saving Features" to version 2.3.0	Samsung	Offline check	(*6) Day4 09:55-10:11
98	22	R1-01-0417	Revision of TR25.840 "Terminal Power Saving Features" to version 2.3.0	Samsung	Approved	(*6) Day4 17:20-17:26

8.4 Terminal power saving features (Ad Hoc 22) Work Item Code : RInImp-TPS

(*1) Mr. Ju Ho Lee (Samsung) presented this paper.

This paper proposed to introduce the procedure (guidance) to the TR on how the RNC should behave in the different situation with gating in order to enable the use of gating during SSDT is activated.

There took place long discussion.

- What is the added benefit (gain) of this proposal ? We need to see the benefit because it would add more complexity to the normal gating operation.
- → This proposal would not increase complexity in terms of UE implementation. In fact, no change is needed to physical layer specifications.
- Then what is the change ?
- → This proposal is just trying to give the guidance on how the RNC should behave. It is summarized in the table 1.
- This is not solving the problem on the fact that Gating and SSDT cannot co-exist but just suggesting the RRC procedures in terms of which message is effectively to be transmitted first over the air and then Iub. This is just suggesting the sequence of activation and de-activation done by the RNC in order to take advantage of both feature. This is really RAN WG2 and RAN WG3 issue. And we need also to consider the gating in the uplink.
- \rightarrow This is not RRC issue. \rightarrow Yes it is RRC issue...

Finally chairman stopped the discussion and suggested offline discussion. He proposed just to put in the TR that this issue (operation of gating with SSDT feature) needs to be further studied.

(*2) Mr. Markku Tarkiainen (Nokia) presented this paper.

In the last RAN meeting there was a question raised on the DPCCH gating with respect to the UE capability and during RAN WG1#18 meeting we did not address the topic. It was discussed in the previous RAN that RAN WG1 should formulate the view and then provide it to the other WGs. Thus, this papers proposing that UE's capability with gating is optional.

Mr. Dirk Gerstenberger (Ericsson) remarked that the scope of this gating feature had changed dramatically in the RAN WG2#18 meeting and now higher layers are getting more involved. There is a question whether we should keep this work item itself. Therefore we had better wait until all the details on gating are clarified in all relevant working groups before we decided optional/mandatory issue.

Chairman agreed with this comment and stated that we should keep this optionality issue blank for the time being and he will present the situation in his report to RAN as follows.

In the past there has been view in WG1 that gating is fully optional, but it's understood that the situation needs to be revisited once all the details and impacts to capacity etc. are finalise.

(*3) Mr. Markku Tarkiainen (Nokia) presented this paper.

In RAN WG2#19, the outer loop power control modifications during basic gating period were approved. It was proposed that outer loop power control based on CRC attached to zero transport block will be used also during DPCCH gating. This is because DPCCH BER will not offer good enough performance for outer loop. Consequently, this requires changes in multiplexing definitions in the TS 25.212. However, the current implementation of changes in TS 25.212 is not fully optimal. The paper clarified further the effects of outer loop power control to multiplexing chains.

Some discussion took place.

- How many repetition will actually be used ? much more than 1 or 2 ? \rightarrow for further study

- Too much repetitions of CRC bits seems to be some kind of problem that we do not have in the non gating case. → It is independent of gating. It could occur even in non gating when long period of zero length transport block with CRC.

Chairman concluded further consideration is needed on this issue.

(*4) Mr. Tim Moulsley (Philips) presented this paper.

This paper looks at the problem of gating and compressed mode. The current assumption is that gating should be disabled before initiating compressed mode. Now this does not seem to be an necessary restriction. In this paper a solution to using gating and compressed mode patterns at the same time is provided.

Mr. Dirk Gerstenberger (Ericsson) questioned to Samsung why they in the first place disabled gating during compressed mode in the TR.

Mr. Ju Ho Lee (Samsung) answered that is because of simple operation of gating. But Samsung had studied the further possibility of co-existence with SSDT and with compressed mode.

- Is there any problem with power control ? \rightarrow No.

Chairman concluded that we agreed on this text proposal in principle though there may be some rewording needed. For the details of text proposal chairman suggested offline discussion.

/** Day2 Coffee break 15:54–16:28**/ (*5) Mr. Ju Ho Lee (Samsung) presented this revised TR.

This revision includes some clarifications on the discussions before RAN WG1#19 and some editorial corrections. Although the version number v2.1.0 is being put on the cover page, correct version number of this TR is v2.2.0. Mr. Dirk Gerstenberger (Ericsson) remarked that

- Description (including figure) on the impact of compressed mode on battery life improvement should be included since we have received an answer from RAN WG4.
- Section 8.1.2.3 (Conclusion section) needs to mention that UE battery life improvement depends on UE implementation.

Chairman agreed with this comment. These would be incorporated at the same time with inclusion of **R1-01-0280**. Mr. Dirk Gerstenberger questioned how we should proceed with this TR.

Chairman explained the reason why this TR had not been raised to v4.0.0. in the previous RAN. It was because the impacts to the other WGs were not clear at that time. Now, RAN WG3 has its own TR and RAN WG4 has discussed and we received input based on that discussion. Current situation is that we now do not see what are the impacts in RAN WG2. Mr. Ju Ho Lee informed that RAN WG2 is going to finalize the relevant works by May meeting as release 4. Chairman stated that he would write in his report to RAN that impact on RAN WG2 section remains empty because the work is now on-going in RAN WG2.

Chairman concluded that this TR was approved and new text proposal in R1-01-0280 as well as the comments from Mr. Dirk Gerstenberger will be incorporated in the next revision. The revision was made in **R1-01-0395** and reviewed on Day 4. (See No. 97)

(*6) Mr. Ju Ho Lee (Samsung) presented this revised TR.

This is the revision of **R1-01-0296**. (See No.96)

Mr. Dirk Gerstenberger (Ericsson) remarked that something is wrong in figure 9 in newly added section 8.1.2.2.3. According to the table 12, 13, improvements cannot never be more than 65% however in the figure 9, it is more than 95%.

Mr. Ju Ho Lee answered that the data in the table 12, 13 were calculated by Nokia whereas figure 9 is based on the calculation from Samsung. He added that the gain of gating depends on the implementation and hence table and figure can be different. Chairman remarked that some explanation is needed and suggested offline discussion for this explanation.

Mr. Dirk Gerstenberger questioned again how we should proceed with this TR.

/** Day4 coffee break 10:13-1045 *

(*7) Mr. Ju Ho Lee (Samsung) presented this revised TR.

According to the offline discussion, section 8.1.2.2.3 was removed and instead at the end of 8.1.2.2.2, the description of the impact of compressed mode and UE battery life improvement was added. There was no comments raised and this TR was approved. The new version can be found in **R1-01-0428**.

Dirk Gerstenberger (Ericsson) questioned if we are to submit this TR for the next RAN for approval or not. Chairman answered as follows.

From RAN WG1 point of view we could perhaps do that. However I see one problem with the TR. That is that RAN WG2 section is empty and RAN WG2 does not have a TR of their own. So I think we just provide this TR to RAN as a part of this work item reporting. In the last RAN, comment was that RAN WG2 section was missing and it was not proposed for approval. I think we can say that from RAN WG1 point of view we have things more or less there. Some minor details needs to be improved but I guess from the RAN WG1 point of view TR is completed and could be approved. But we understand that RAN WG2 part is missing. At least this is my understanding of this TR.

Mr. Dirk Gerstenberger stated that it would be good to express also that there are concerns in RAN WG1 of this solution, for instance, concerns on complexity.

Chairman answered that he would mention in his report to RAN that there are still concerns mentioned in RAN WG1.

8.5 USTS (Ad Hoc 31) (Release 4 study item) Study Item Code : RInImp-USTS

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
99	31	R1-01-0232	Revision of TR25.854 (Study report on USTS)	SK Telecom Nokia	Approved	No (*1) Comments _{Day2 18:11-18:17}
100	31	R1-01-0245	Considerations on Timing Alignment Bits for USTS	LGE SK Telecom	Not Approved	(*2) Day2 18:17-18:39

(*1) Mr. Duk Kyung Kim (SK Telecom) presented this TR.

The revision has been done to reflect the comments received in RAN WG1#18 meeting. The version number is to be updated to v0.2.0 in **R1-01-0396**.

Eventually the version number was raised after the meeting to v1.0.0 for RAN submission. (for information)
(*2) This paper discussed several aspects of TABs for USTS regarding the TAB bit pattern and TAB transmission in Node B. This is a kind of revision of R1-01-0062 which was reviewed in RAN WG1#18 meeting taking into account the comments received and the fact that timing interval had been changed from 20ms to 200ms.
Ms. Evelyne Le Strat (Nortel) questioned whether this scheme is to be applied only in soft handover case or not because Node B can never know whether the UE is in soft handover or not. It was answered that this scheme is to be applied irrespective of soft handover.

After having some discussion, chairman concluded that we should not include this scheme into the TR at this point of time because it seems that it would need further clarification including the necessity of the scheme.

/*** Day 2 closed at 18:39 ***/

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
101	24	R1-01-0392	25.950 (v1.1.0) UTRA High Speed Downlink Packet Access	TSG RAN WG2	Noted	No (*1) Comments Day3 09:32-09:35
102	24	R1-01-0205	Clarification of simulation results of type-III HARQ bit mapping proposal	Panasonic	Noted	No (*2) Comments _{Day3 09:41-09:44}
103	24	R1-01-0206	Text Proposal for HARQ complexity evaluation section of TR25.848	Panasonic	To be revised	(*3) Day 3 09:44-09:56
104	24	R1-01-0331	Peak to Average Impact at Node-B due to HSDPA	Motorola	→ Text proposal	(*4) _{Day 3} 10:00-10:17
105	24	R1-01-0332	Physical Layer Structure for HSDPA – Text Proposal for Section 6.1	Motorola	To be revised	(*5) Day 3 10:19-10:25
106	24	R1-01-0329	Complexity Analysis on MPIC for HSDPA	NTT DoCoMo	Noted	No (*6) Comments Day3 10:30-10:36
107	24	R1-01-0330	Text Proposal for performance of MPIC in TR25.841	NTT DoCoMo	To be revised	(*7) Day 3 10:36-10:45
108	24	R1-01-0338	Reduction of DL channel quality feedback rate for HSDPA	Sony	→ Text proposal	(*8) Day 3 11:45-12:10
109	24	R1-01-0207	System Level simulation results of HSDPA estimating downlink channel quality from the transmit power of DPCH	Panasonic	Offline checking	(*9) Day 3 12:10-12:27
110	24	R1-01-0309	Semi-static Code Space Division of physical HS-DSCH	Lucent	Offline	(*10) Day 3 12:29-13:13
111	24	R1-01-0274	System aspects of power control for Fast Cell Selection in HSDPA	NEC	Text proposal	(*11) Day 3 14:45-14:52
112	24	R1-01-0281	Cell Selection in HSDPA	Philips	Noted	(*12) Day 3 14:53-15:28
113	24	R1-01-0248	Use Long-Range Prediction to Improve the Performance of AMCS and HARQ with MCS Delay	Wiscom	Noted	(*13) Day 3 15:30-15:37
114	24	R1-01-0249	Long-Range Prediction (LRP) of Faded Signals in HSDPA for FDD and TDD	Wiscom	Not included in the TR	(*13) Day 3 15:37-15:56
115	24	R1-01-0258	Double data rate for FDD downlink through channel code puncturing in MIMO channels	Nokia	Noted	(*14) Day 3 16:38-16:49
116	24	R1-01-0333	Alternatives in MIMO Link Design	Motorola	Noted	(*15) Day 3 16:51-16:56
117	24	R1-01-0307	Technical Report text change proposal for Section 7.4.1	Lucent	Approved	No Comments Day3 16:56-16:58
118	24	R1-01-0306	MIMO physical layer description	Lucent	Approved	No Comments Day3 16:58-17:02
119	24	R1-01-0313	Further Discussion on UE Complexity for MIMO architectures	Lucent	→ Text Proposal	(*16) Day 3 17:05-17:22
120	24	R1-01-0308	Link level results for HSDPA using multiple antennas in correlated and measured channels	Lucent	→ Text proposal	(*17) Day 3 17:22-17:42
121	24	R1-01-0286	Link Level Simulation Results for HSDPA: Comparison between MIMO and Tx Diversity	Fujitsu	Noted	(*18) Day 3 17:42-17:56
122	24	R1-01-0290	Stand-alone DSCH principles and benefits	Nortel Wavecomm France Telecom	Noted	(*19) Day 3 18:02-18:20
123	24	R1-01-0292	WCDMA based Stand-alone DSCH physical layer related aspects	Nortel Wavecom	Noted	(*19) Day 3 18:23-19:36
124	24	R1-01-0391	OFDM as a candidate for stand-alone DSCH	Wavecomm France Telecom Nortel	Noted	(*19) Day 3 19:36-20:29
125	24	R1-01-0295	HSDPA System Level Simulations	Nokia	Noted	(*20)

8.6 High Speed Downlink Packet Access (Ad Hoc 24) Study Item Code : RInImp-HSDPA

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
126	24	R1-01-0240	AMCS Performance Evaluation for TDD	Siemens	Noted	(*21) Day 4 11:35-11:43
127	24	R1-01-0408	Text proposal for section 8 of TR 25.848	Siemens	To be revised	(*22) Day 4 11:43-12:00
128	24	R1-01-0251	Link Level Simulation Results of HSDPA in TDD Mode	Wiscom	Noted	(*23) Day 4 12:00-12:11
129	24	R1-01-0250	Proposal of a HSDPA Frame Structure in TDD Mode	Wiscom	Noted	(*24) Day 4 12:11-12:22
130	24	R1-01-0259	METRA project results: Link-level simulation results for standard-friendly MIMO techniques in the TDD mode of UTRA	Nokia	Noted	No Comments Day4 12:22-12:25
131	24	R1-01-0409	Text Proposal for HARQ section of TR25.848	Panasonic	Approved	No (*25) Comments Day4 12:28-12:30
132	24	R1-01-0244	Impact of block length on turbo-code performance for HSDPA	Ericsson	Discussed	(*26) Day 4 13:57-14:05
133	24	R1-01-0310	Further results on the impact of code block size on HSDPA performance	Lucent	Discussed	(*27) Day 4 14:05-14:40
134	24	R1-01-0237	Enhanced HARQ Method with Signal Constellation Rearrangement	Panasonic	Noted	(*28) _{Day 4 14:44-15:00}
135	24	R1-01-0311	Methodology for HARQ System Simulations	Lucent	Noted	(*29) Day 4 15:01-15:10
136	24	R1-01-0312	Downlink Model for HSDPA	Lucent	Noted	(*30) Day 4 15:11-15:23
137	24	R1-01-0401	Revised Text Proposal for performance of MPIC in TR25.841	NTT DoCoMo	Approved	No (*31) Comments Day4 15:26-15:28
138	24	R1-01-0400	Physical Layer Structure for HSDPA – Text Proposal for Section 6.1	Motorola	Approved	No (*32) Comments Day4 15:28-15:29
139	24	R1-01-0406	Text contribution on MIMO UE complexity	Lucent	Approved Ref. removed	(*33) Day 4 15:29-15:34
140	24	R1-01-0407	Text contribution on MIMO performance	Lucent	Approved Ref. removed	(*34) Day 4 15:35-15:38
141	24	R1-01-0405	Text contribution on MIMO physical layer description	Lucent Nokia	Approved	No (*35) Comments _{Day4 15:38-15:41}
142	24	R1-01-0410	Text Proposal for MIMO and Tx Diversity Comparison Section	Fujitsu	Not approved →Offline	(*36) Day 4 15:41-15:46
143	24	R1-01-0397	Text proposal for associated downlink signaling on TR25.848	Sony	Approved	No (*37) Comments _{Day4 15:47-15:49}
144	24	R1-01-0423	Text proposal for section 8 of TR 25.848	Siemens	Approved	No (*38) Comments _{Day4 16:04-16:05}
145	24	R1-01-0413	Text proposal in TR for Semi-static Code Space Division of physical HS-DSCH	Lucent	Approved	No (*39) Comments Day4 16:49-16:50
146	24	R1-01-0420	Stand-alone DSCH, proposed text for inclusion in TR 25.848 v 0.4.0	Nortel	Approved	No (*40) Comments Day4 16:50-16:55
147	24	R1-01-0422	Text Proposal for Section 7.1.2.1.2 – Complexity Impacts to RNS	Motorola	Approved	No (*41) Comments _{Day4 16:55-16:57}
148	24	R1-01-0425	Recommendations on HSDPA	Drafting Group	To be revised into LS	(*42) Day 4 16:57-17:12

(*1) This is the RAN WG2 TR on HSDPA. Some sections were left blank for inclusion of appropriate texts from the RAN WG1 TR.

In section 14.1, RAN WG2 listed their recommendation as follows.

1. RAN WG2 has determined the MAC-HSDSCH at the Node B with HARQ and scheduling functionality to be feasible and recommends that this be adopted for inclusion in Rel-5 to enable the techniques being addressed for HSDPA.

2. Adaptive Modulation and Coding - RAN WG1 to make recommendation.

3. RAN WG1 to provide recommendations on intra-Node B Fast Cell Selection. RAN WG2 proposes not to include inter-Node B fast cell selection in Rel-5.

4. RAN WG1 to provide recommendation on MIMO. RAN2 has determined impacts on WG2 to be minimal

based on current understanding.

- 5. RAN WG1 to provide recommendation on Stand-alone DSCH. RAN WG2 recommends that UTRAN evolution should enable the introduction of this technique if found necessary in future releases.
- (*2) Panasonic presented this paper. This is a follow up paper of R1-01-0031 which was reviewed in RAN WG1#18. In RAN WG1#18 it was pointed out that there is no difference between so-called symbol combining and conventional combining in QPSK case. Panasonic conducted simulation and the results put in this paper shows that there is actually no difference in QPSK case. Having this result, Panasonic proposed the proposed mapping method to be used for 16QAM or higher level modulation because proposed method can reduce the receiver's buffer size achieving the same performance as the conventional method for those modulations. Text proposal of this scheme is in R1-01-0206.
- (*3) This is the text proposal of R1-01-0205 (Above).

Mr. Erik Dahlman (Ericsson) remarked that although this is an interesting proposal he was a bit reluctant to introduce this kind of detailed description into the feasibility study report. Mr. Amitava Ghosh (Motorola) supported this comment and added we should just point out general techniques. Chairman suggested that we would not include this long text proposal as it is but just put simple statement in

connection with the existing type III HARQ complexity values (table1). Panasonic agreed with this suggestion and provided brief text proposal in R1-01-0409. This was reviewed on

Day4 and approved. (See No.131)

(*4) Mr. Amitava Ghosh (Motorola) presented this paper.

This paper shows peak-to-average power ratio impact at Node B in case of multi-level modulation, higher order modulation. In conclusion it says that it can be concluded that the PAP (Peak to Average Power ratio) is not affected for a W-CDMA system using HS-DSCH with higher order modulation.

Ms. Evelyne Le Strat (Nortel) remarked that we need to be a bit cautious when analysing the result of this analysis because the assumption of 20 users utilizing Walsh of size 32 and equiprobable mix of QPSK, 16 QAM and 64 QAM does not necessary reflect the real system (peak bit rate/user). In the case of small number of the users using high order modulation, result may be different from what is presented here. We need to have RAN WG4 to consider this issue in terms of RF characteristics of the Node B. Chairman remarked that in case of small number of the user PAP is getting much more easier.

Regarding this Mr. Amitava Ghosh stated that there is a typo in this paper on the assumption. 20 user should be replaced by 20 codes.

Then one user for HSDPA and others users with QPSK ?

Mr. Amitava Ghosh stated there should be some more simulation done where other users assigned QPSK, 16 OAM and 64 OAM.

What should we put in the TR ? The relevant section is still blank. We should not put an optimistic indication in the TR.

After some discussion, chairman concluded that a small text proposal without curves on this issue be made by Mr. Amitava Ghosh. We will check it on the screen before it is implemented in the TR. Eventually very short text proposal was made in R1-01-0422. This was reviewed on Day 4 and approved with no comment. (See No. 147)

(*5) Mr. Amitava Ghosh (Motorola) presented this paper.

This paper is the text proposal of Stop and Wait protocol to be added to Section 5.2. One comment was raised by Lucent which stated that there is a contradiction in the description. In the description of Stop-and-Wait it says that UE has to have only one block memory and it says N channel operation offers solution to the particular problem of Stop-and-Wait. But if we have parallel channel operation like N channel operation, then Stop-and-Wait would not have any memory advantage over the selective repeat. Mr. Amitava Ghosh agreed to this comment. Chairman suggested offline work for revision between Motorola

and Lucent. R1-01-0400 was allocated for the revision. It was reviewed on Day4 and approved. (See No. 138) (*6) Mr. Masafumi Usuda (NTT DoCoMo) presented this paper.

- This paper showed the results of complexity analysis on multipath interference canceller(MPIC) which had been newly introduced in RAN WG1#18 meeting in R1-01-0102. In RAN WG1#18 there had been a request for complexity analysis for this method. As promised in RAN WG1#18, NTT DoCoMo provided this paper. The analysis is based on the number of computation operations, such as multiplication and addition, and the complexity of MPIC is compared with a conventional matched filter (MF) based Rake receiver without MPIC. It was shown that MPIC with 2/3/4-stage requires approximately 3/5/7 times larger number of multiplications and additions compared with a conventional MF based Rake receiver without MPIC.
- (*7) Mr. Masafumi Usuda (NTT DoCoMo) presented this paper.

This is a text proposal of the performance of MPIC for the TR.

Mr. Serge Willenegger (Qualcomm) questioned on Figure 1 about the reason why the throughput of 2path with MPIC is better than 1path in some points in case of MCS1. It was answered that is because of diversity effect. Mr. Amitava Ghosh (Motorola, editor of the TR) asked if it is possible to condense the text. Mr. Masafumi Usuda agreed with this comment.

Mr. Tim Moulsley (Philips) remarked that there should be a description in the TR on how we actually exploit this kind of technique, e.g. choice of modulation at Node B in the knowledge of some receiver property. Chairman suggested offline discussion for revision. The revision was provided in R1-01-0401. It was reviewed on Day4 and approved for TR. (See No. 137)

/*** Day3 coffee break 10:45 – 11:15 ***/ /*** First voting for vice-chairman position started after the coffee break. ***/

(*8) Mr. Katsutoshi Itoh (Sony) presented this paper.

This paper was the revision of R1-01-0231 which had been distributed on the e-mail reflector.

A proposal was made in RAN WG1#18 in **R1-01-0074** which exploits TPC commands to reduce the feedback rate for downlink channel quality estimation. The current paper presented system simulation results to show that the proposed scheme can actually be used to reduce the feedback rate without impacting the system throughput. It was also suggested that this scheme enables network to do trade-off between uplink capacity and channel quality estimation accuracy by giving UTRAN the control of the channel feedback rate.

Mr. Erik Dahlman (Ericsson) remarked that though he agrees with the proposed method, he does not think that OTA(over the air throughput) is an appropriate performance measure. Performance measure here should be both of service throughput (the number of correct bits from transmitter to receiver) and quality measure (average packet call throughput). OTA is not relevant because it does not take into account re-transmissions and OTA does not take into account the load, either.

Mr. Katsutoshi Itoh answered that to be sure we need to have quality measure but for the service throughput, the OTA is relevant. The results shown in this document does include the re-transmissions and it corresponds to the true throughput seen from Node B and not from UE. He added that service throughput including the load can be calculated approximately through the values in the table.

Motorola clarified that the definition of OTA does take into account the re-transmission.

There was another comment that for the TR, it is too much detail.

Chairman concluded that proponent prepare a brief text proposal. **R1-01-0402** was allocated for the text proposal. Eventually text proposal was further revised into **R1-01-0397**. This was reviewed on Day4 and approved. (See No.143)

(*9) Panasonic presented this document.

This paper is the continuous work of paper presented in RAN WG1#18 (**R1-01-0004**). This paper presented more elaborate simulation results

The following assumptions are added in order to respond to the comments made in the previous meeting.

-UE velocity of 40km/h and 120km/h are considered.

-TPC error ratio is set to 4%.

-CIR measurement error in UE is introduced as a statistical variable with 1dB sigma.

-CIR reporting erasure is set to 1%.

After having some discussion, chairman suggested to make a small text proposal on this. We do not need these simulations result from the feasibility point of view.

Mr. Amitava Ghosh (Motorola, editor of the TR) pointed out that this is already included in the TR in section 6.2. Chairman proposed to have offline discussion for the exact text including the discussion on whether the current text in the TR should be modified or not.

(*10) Lucent presented this paper.

This paper proposed code space division of the physical HS-DSCH into several equal multi-coded parallel physical HS-DSCHs as an alternative physical channel structure in conjunction with minimum TTI of one slot. Some kind of broadcast channel is needed to support this that carries information on the code space availability. Long discussion took place.

After the discussion chairman concluded as follows

Even if this would need only one additional issue that we need to have some kind of broadcast channel (physical layer), we cannot do it as physical layer independent issue. We need to have coordination with higher layers. If higher layer (RAN WG2 in this case) gives us permission to do it then maybe we can do it. Therefore the best way forward is to bring this issue to the upcoming Joint Ad Hoc with RAN WG1 and RAN WG2 in May. Because this would contain physical layer issue and higher layer issue at the same time it would be very difficult to determine how to proceed within only one group.

Chairman added comment on the text proposal attached to this paper that it is very short and if this kind of information cannot be derived from the current TR, it should be included in the TR. But we need to check whether and how the text should be accommodated in the TR from feasibility study point of view. This checking should be done offline. This text proposal was finally modified in **R1-01-0413**. It was reviewed and approved on Day3. (See No. 145)

/*** Day3 lunch break 13:14-14:42 ***/

(*11) Mr. Kojiro Hamabe (NEC) presented this paper.

This paper proposed an additional alternative of power control techniques for Fast Cell Selection(FCS). This paper also contained a text proposal for this additional alternative for the TR in section 6.4.3.

Mr. Erik Dahlman (Ericsson) agreed with this proposal and stated that indeed the alternative (2) should be replaced by this alternative (4). He added that the original intention of alternative (2) was actually that of alternative (4).

He added that although this is currently written as a part of FCS, this is primarily related to the situation when the UE is in soft handover.

Chairman suggested that proponent provide the small text with revision marks to the editor for inclusion.

(*12) Mr. Tim Moulsley (Philips) presented this paper.

This paper presented some simulation results on the potential benefits of FCS in HSDPA.

It was shown that the SIR gain derived from FCS appear to become worthwhile for SIR values below about 5 dB and paper suggested that this gain could be obtained in

1. Fair schedular

- 2. Maximum coverage required
- 3. Poor propagation conditions

There took place some question and answer session but in general this paper was supported.

Regarding this FCS issue, we are asked by RAN WG2 to provide recommendation on intra-Node B FCS. RAN WG2 proposed not to include inter-Node B FCS in release 5 and we had to recommend how we consider about the inclusion of Intra-Node B FCS in terms of release. (See No.101)

Chairman questioned people how we should recommend RAN WG2 on this Intra-Node B inclusion. Long discussion was made. There were no definitive comments. Concerning the postponement of this feature to further release (later than release 5), for and against seemed even.

Ms. Evelyne Le Strat (Nortel) remarked.

We are not sure that there is no cost for the Intra-Node B FCS compared to no FCS.

We are not sure either that the signalling is the same in the cases where we have Intra-Node B and Inter-Node B FCS because we identified in the TR that the inter-Node B FCS may require additions of some signalling in order to ensure consistency of the scheduling because MAC is in Node B.

Based on this, unless there are significant gains for Intra-Node B FCS, unless we can really show that it is extremely simple to consider Intra-Node B and that there is gain which justifies the introduction of Intra-Node B in one release ahead of Inter-Node B, we may try to treat Intra-Node B and Inter-Node B FCS together in the same release so that we can have fully consistent scheme.

Chairman fully agreed with this comment and concluded that we recommend RANWG2 that study of Intra-Node B and Inter-Node B FCS should be considered together and not separately. Both Intra and Inter Node B FCS should be studied further during release 5 HSDFPA.

(*13) Wiscom presented these 2 documents.

R1-01-0248 showed the simulation results of using Long-Range Prediction(LRP) to improve the system performance of AMCS and HARQ with MCS feedback and selection delay. LRP method itself had been presented already in RAN WG1#18 meeting in **R1-01-0025**.

The simulation results showed that the performance improvement by using prediction is as much as 1.0 to 1.5 dB with Ec/Ioc between -5 to 5dB at intermediate vehicle speed.

Since **R1-01-0249** contains the text proposal of long-range prediction method, chairman suggested to review R1-01-0249 in succession.

Mr. Robert C. Qiu (Wiscom) presented this paper. This was the revision of **R1-01-0025**. It was proposed to include LRP based channel prediction in HSDPA for both FDD and TDD mode into the TR. Text proposal was attached to this paper.

After short discussion chairman proposed not to included this into TR for the time being with following reasons.

- There had not been discussed signalling issue on this.

- This does not seem essential from the feasibility study point of view.

He proposed to continue the discussion after the feasibility phase.

/** Day3 coffee break 16:03-16:33 **

(*14) This paper presented a comparison of 2 different type of techniques to double the data rate in FDD downlink when 2 Tx and 2 Rx antennas are available. One is the punctured scheme in which the rate 1/3 code is punctured to rate 2/3 in order to double the data rate and the loss of coding gain is compensated by applying dual-antenna RAKE. The other one is layered scheme which is similar to the MIMO technique that has been discussed so far. As a conclusion it says that the punctured scheme achieves a better performance with a significantly lower receiver complexity than the layered scheme.

Lucent made a comment which said that the layered techinique discussed in this paper is different from the MIMO techinique which had been proposed. Lucent explained the differences. They also pointed out that they basically agree with the conclusion. Because the situation this paper did comparison is relatively low data rate (order of ksps) and in the low data rate situation, combination of Tx and Rx diversity is actually superior to MIMO. Lucent had pointed out this fact already in RAN WG1#18 meeting. Lucent's MIMO proposal is for high data rate of 10.8Mbps and above.

Mr. Said Tatesh (Lucent) remarked in answering chairman's comment that there is no need to feedback this paper into TR because what we are looking in the TR is whether the concept is feasible or not. And it is feasible now. And later when we go thorough the standardization process we should look at all the alternatives. Chairman remarked that for the baseline complexity part, the comparison of different technique might be needed. Chairman suggested offline discussion on the inclusion of the paper into TR between Nokia and Lucent. **R1-01-0405** was allocated for this text proposal. It was presented on Day4 sourced by Lucent and Nokia and approved. (See No.141)

(*15) Mr. Amitava Ghosh (Motorola) presented this paper.

In this paper, various alternatives to V-BLAST proposed by Lucent are outlined. It was stated that those alternatives should be evaluated in detail in RAN WG1.

- Lucent remarked that they basically agree with the approach of this paper.
- (*16) Lucent stated that they would provide the text proposal which summarizes the conclusion of this paper. Chairman remarked
 - Is it possible to replace "homodyne" to more familiar term?
 - Absolute values put in this contribution should be got rid of unless detailed explanations are given because it is impossible for anybody to calculate if just absolute values are given.
 - Mr. Erik Dahlman (Ericsson) requested to postpone the decision whether we include this into TR or not.
 - There were some doubts raised about the complexity estimates in this paper.

Chairman stated that text proposal should be produced regardless we approve it or not.

R1-01-0406 was allocated for this text proposal. It was reviewed on Day4 and approved. (See No. 139) (*17) Lucent presented this slide on the screen.

Lucent had already showed in the past meetings the gains of MIMO in spatially correlated channels compared to conventional single antenna schemes. In this presentation, link performance results on the following channel environments were shown.

1. A micro cell environment suggested by Siemens

2. Actual channels measured in a dense urban environment (midtown Manhattan)

The performance results similar to those in the previous paper (**R1-01-0131**) were shown. The (2,2) systems are minimally affected by channel correlations. The (4,4) systems are less robust, however significant performance improvements can be achieved by transmitting with two of the four antennas and using larger constellations. Lucent proposed that some text proposal should be included in the TR. After having short discussion on this proposal, chairman agreed to it. **R1-01-0407** was allocated for the text proposal. It was reviewed on Day4 and approved. (See No. 140)

(*18) Mr. Hiroyuki Seki (Fujitsu) presented this paper.

This paper presented link level simulation results using the multiple reception antennas diversity with STTD and closed-loop transmit diversity schemes to compare to the MIMO performance. The FER performance for the same total data rate of 10.8 Mbps was compared in a flat fading channel.

Although according to the simulation results significant performance gains could not be observed for MIMO compared to multiple antenna diversity, this paper concluded that it is due to the flat Rayleigh fading channel assumption and MIMO architecture will have possibly significant performance gains in the practical propagation environments with high data rate higher than 10.8Mbps.

Lucent appreciated this contribution. Although they agreed with the results presented in this paper, they added following 2 points.

- In fact STTD can achieve comparable performance to the MIMO system but its data rate is limited basically 10.8Mbps whereas the MIMO technique can achieve higher peak data rate. (2,2) system can achieve 14.4 Mbps.

- In closed loop transmitter diversity case, the amount of feedback is actually going to be more than that of the MIMO system.

There was another comment that code re-use feature of the MIMO system should also be emphasized against the transmit diversity.

Chairman remarked that we needed not to include this to the TR. But eventually related text proposal was presented in **R1-01-0410** by the proponent on Day4. (See No. 142)

Chairman asked people how we should make recommendation on MIMO to RANWG2 because we were requested a recommendation.

Mr. Amitava Ghosh (Motorola) remarked that we should use **R1-01-0333** as a baseline that says that MIMO is feasible but we need to study all these alternative techniques.

Chairman agreed to this comment.

(*19) Ms. Evelyne Le Strat (Nortel) presented R1-01-0290. Principles of Stand-alone DSCH were introduced in detail. R1-01-0292 was also presented by Ms. Evelyne Le Strat and this paper discussed WCDMA based Stand-alone DSCH physical layer related aspects. Ms. Nathalie Goudard (Wavecom) presented R1-01-0391 which introduced OFDM technology as a candidate for Stand-alone DSCH. Text proposal for Stand-alone DSCH had been prepared in R1-01-0293 but it was not presented.

All these 3 papers discussed Stand-alone DSCH which is defined as a DSCH on a downlink carrier that is different from the WCDMA carrier. The benefits and defects were explained in detail.

There took place very long discussion. Quite a lot of comments were raised. Major opinion was rather negative to this proposal both for WCDMA based and OFDM based Stand-alone DSCH.

Finally chairman concluded as follows.

Text proposal should not include OFDM because it is too early to say something on this from the feasibility point of view. We have only received one piece of paper for OFDM. It would require lots of more work to be done before we can say something on this OFDM scheme from feasibility point of view. Moreover RAN WG2 TR does not mention anything about OFDM so it would not be inconsistent even if do not mention it in our TR. In fact it would need TSG level discussion before it should be discussed in WG level because it is completely new air interface. Chairman would report this in his report to RAN.

For WCDMA based Stand-alone DSCH, text could be included in the TR however the current proposal (R1-01-0293) is too detail. Chairman asked Ms. Evelyne Le Strat to prepare very brief text proposal by Day4. (*20) Mr. Markku Tarkiainen (Nokia) presented this paper.

This paper discussed first system level simulation results for HSDPA. It was shown that the use of AMC is beneficial to increase the network throughput as well as user throughput.

Chairman remarked that this results confirms what has been stated in the TR on the benefit of AMC. (*21) Siemens presented this paper.

This paper presented TDD link level simulation assumptions and performance results for different Adaptive Modulation and Coding Schemes (AMCS). It was designated to the TR. The results were compared with the performance results for FDD presented in R1-00-0727. This paper does not investigate the optimum number of AMC schemes.

It is shown that higher order modulation is applicable for the TDD mode. The presented link level performance results are comparable with that of FDD. Due to the performance similarities between TDD and FDD, the alignment with respect to AMC schemes for both mode seems to be possible.

There were a couple of questions for clarification on the simulation assumptions. Those were answered.

Since Siemens had prepared a text proposal for this, it was reviewed in succession.

(*22) This is the text proposal for **R1-01-0240**.

Proponent asked people to change "Real" to "Real/Ideal" for the channel estimation value in Table 1. There was a comment that simulation assumptions/parameters/algorithms(channel estimation) should be clarified so that other parties can repeat the simulation.

There was another comments regarding the unit of x-axis saying that in FDD results, Ior/Ioc is used whereas in this simulation results Eb/No is used and it is difficult to compare both results.

Chairman suggested that we should not modify the unit in the curves in the TR at this stage instead we should put some small statement that says both units need to be same unit for comparison.

As a conclusion this text proposal was agreed in principle but needs to be revised to modify the value of channel estimation in Table 1. The revision was made in **R1-01-0423** and this was approved in the afternoon. (See No. 144)

(*23) This paper proposed to fix the frame structure for the easiness of comparison of simulation results. The link level simulation results were shown on different MCS schemes for HSDPA in TDD mode which used the proposed frame structure.

There were several concerns raised against fixing the frame structure. Major opinion was that we are to optimise the frame structure and not to fix it. Until now no company has not yet got convincing result that shows which is the best frame structure. We should not lock the frame structure.

Chairman remarked that we should now concentrate on AMC or HARQ techniques and frame structure itself is not that important when we do comparison of the simulation results and therefore frame structure should not be fixed.

(*24) This paper proposed the frame structure that was introduced and used in R1-01-0251. Wiscom remarked in response to the comments received in the discussion of R1-01-0251 that their intention was not to fix the frame structure but to define a frame structure just for the reference so that simulation results provided by several companies can easily be compared.

This paper also proposed a table for information bit per frame and the information date rate for different MCS schemes.

- Siemens pointed out that similar table is already in TR.
- (*25) This is the revision of **R1-01-0206** which was reviewed on Day3. (See No.103) Following the discussion on Day3 the text proposal was revised into very brief and small one in section 6.3
- (*26) Mr. Erik Dahlman (Ericsson) presented this paper.

The benefits of variable TTI were claimed in RAN WG1#18 in **R1-01-0079** based on the argument that fixed TTI would reduce turbo code performance due to very small code block size. This paper compared the performance of larger code block size and smaller code block size based on the simulation results and pointed out that although there is a gain with larger code block size for higher SIR (lower BLER) (but gain is much smaller than what was shown in **R1-01-0079**), there is no such gain for lower SIR (higher BLER). It is also pointed out that Hybrid ARQ will typically operate with a relatively high initial BLER (high as 50% or beyond).

Based on this results, this paper concluded that there are no significant gains for larger code block size and hence from this point of view, there are no reason to introduce a variable TTI for HSDPA.

Since there was another related paper (R1-01-0310), chairman proposed to review it in succession.

(*27) Lucent presented this paper. This paper presented modified results of **R1-01-0079** comparing the performance of Turbo code block sizes. New results did agree with that of **R1-01-0244** (Ericsson). This paper still pointed out that when very small code block sizes are used, there is noticeable throughput degradation as compared to large code block sizes. In addition it says that the percentage of overhead with smaller code block sizes is large as compared to large code block sizes. It is also mentioned that the variable TTI approach provides other benefits such as adapting MCS for retransmissions, low signalling overhead and selecting the code block size (for a given MCS level) based on backlog to reduce frame fill inefficiency. They added that if we do simulation with fading channel assumption, results would be different.

There took place a bit long discussion. Finally Lucent remarked that if we exclude all the overhead due to CRC or signalling overhead the difference in the throughput would be very small. (In this sense, discussion agreed with the paper from Ericsson because the conclusion of Ericsson paper was derived in terms of the analysis of turbo code performance.)

Chairman stated that we have to look carefully at the signalling aspect to in the future. But in order for us to be able to make discussion on this aspect we need to have some kind of example proposed to see how the signalling looks like and is impacted in both cases of Fixed TTI and Variable TTI.

(*28) This paper presented a new HARQ method using signal constellation rearrangement. It was shown that by changing the symbol mapping onto the constellation in the re-transmission, which corresponds to the averaging out the bit reliabilities, a significant performance gain can be achieved for 16QAM and 64QAM with compared to normal Chase Combining at the expense of slightly increased complexity. In the simulation, MCS level was kept. It was pointed out by Katsutoshi Itoh (Sony) that the gain was achieved only in the region where S/N is low and hence if AMCS operates properly then this kind of gain would not be achieved because lower MCS level would then be selected. He added that this scheme would need somewhat synchronization mechanism between Tx and Rx and this would increase the complexity compared to easy Chase combining.

It was answered by Panasonic that the intention was to show if you have to retransmit packets and if you chose wrong MCS then you can gain from this method compared to normal Chase combining. This would increase the robustness of Chase combining. For the complexity issue, it is very close to that of Chase combining. Chairman stated that we need probably pretty soon to decide whether we will have Chase combining or

incremental redundancy and then after that if Chase combing is selected this kind of detail optimisations can be considered.

- (*29) This paper discussed about methodology to integrate link-level model with system-level simulations for HARQ performance evaluation. Aggregate E_s/N_t metric was introduced. Chairman stated that we noted this paper. Due to lack of time, he suggested offline discussion if there were questions or comments.
- (*30) This paper provided clarifications to comments and questions on Lucent's Downlink model proposal for HSDPA in RAN WG1#17, RAN WG1#18 and RAN WG2#18. This paper was already presented in RAN WG2#19. Lucent had been suggested by RAN WG2 that this paper should be reviewed in RAN WG1 as well. There was a comment that if Lucent proposes variable TTI, then it is very strange that the values are restricted to {1,2,4,8,16}, there should be 3, 5,.. included.
- (*31) Mr. Masafumi Usuda (NTT DoCoMo) presented this paper. This is the revision of R1-01-0330 which was reviewed on Day3. (See No. 107) The revision was not condensed but was expanded.
- (*32) Mr. Amitava Ghosh (Motorola) presented this paper. This is the revision of **R1-01-0332** which was reviewed on Day3. (See No. 105) Comment was reflected.
- (*33) This is the text proposal based on R1-01-0313 which was discussed on Day3. (See No.119) Chairman raised concern about the existence of reference. He stated that TR should be self-contained. (This had been already pointed out in RAN WG1#18.)
- Proponent remarked that they would provide the revision without reference to the editor of the TR. (*34) This is the text proposal based on **R1-01-0308** which was reviewed on Day3. (See No. 120)
- Proponent remarked that they would provide the revision without reference to the editor of the TR.
- (*35) This is the text proposal based on R1-01-0258 which was reviewed on Day3. (See No. 115)
- (*36) Mr. Hiroyuki Seki (Fujitsu) presented this contribution.

This is the text proposal based on the **R1-01-0286** which was reviewed on Day 3. (See No. 121) Mr. Said Tatesh (Lucent) remarked that the conclusion of R1-01-0286 had been that there was no need to reflect the results to the TR. Mr. Hiroyuki Seki replied that MIMO is quite new technology for 3GPP and therefore the comparison with other technique should be mentioned in the TR. Finally chairman suggested as one possibility that this text might be included in the relevant part of **P1 01 0405**

Finally chairman suggested as one possibility that this text might be included in the relevant part of **R1-01-0405** and suggested offline discussion with Lucent on this issue. He added that the results of different schemes would not be needed at this point of time in terms of feasibility study.

(*37) Mr. Katsutoshi Itoh (Sony) presented this paper. This text proposal is based on the R1-01-0338 which was reviewed on Day3.(See No. 108) Originally R1-01-0402 was allocated for this text proposal, it seems that it was further revised into R1-01-0338. Regarding the text proposal itself, the proponent explained that after having offline discussion only one line was added to section 6.6.2 because current TR already contains most of key items related to the use of TPC.

(*38) This is the revision of R1-01-0408 which was discussed in the morning (See No. 127) There was one missing error that needed to be corrected pointed out by the proponent. "Burstform No." in the table should be replaced by "Burst type". This had been already indicated to the editor.

- (*39) Mr. Amitava Ghosh (Motorola) presented this paper.
 - This is the text proposal which was the outcome of offline discussion concerning **R1-01-0309** which was discussed on Day3. (See No. 110) Following one sentence was to be added in the TR in section 6.6.2 "Associate Downlink Signalling"

The amount of signalling overhead depends on and increases with the flexibility in the code allocation to different UEs as set up by higher layers.

- (*40) Ms. Evelyne Le Strat (Nortel) this paper.
 - This is the text proposal on stand alone DSCH. (See No. 122, 123, 124)
- (*41) Mr. Amitava Ghosh (Motorola) presented this paper.

This is the text proposal based on the **R1-01-0331** which was discussed on Day3. (See No. 104)

(*42) Mr. Amitava Ghosh (Motorola) presented this paper.

This is the answer for RAN WG2. For the recommendations which have been requested by RAN WG2, the answers were prepared reflecting the RAN WG1 discussion on HSDPA.

Mr. Erik Dahlman (Ericsson) remarked on AMC issue that we should put in the recommendation that RAN WG1 considers that AMC should be part of release 5.

Mr. Amitava Ghosh (Motorola) opposed to state that MIMO should be part of release 5.

After some discussion Chairman suggested as one alternative to put it like "RAN WG1 recommends that MIMO should be part of further HSDPA work" and not to mention about any RELEASE here. Finally chairman proposed to make this paper into LS form and send it to RAN WG2 and cc RAN.

R1-01-0430 was allocated for the revised TR. Mr. Amitava Ghosh (Motorola) will distribute this revised TR on the e-mail reflector. This TR would be provided to next RAN.
8.7 Improved Common DL Channel for Cell FACH State (Ad Hoc 28)

No.	Ad Hoc	Tdoc	Title	Source	Conclusion	Notes
149	28	R2-010664	TS25.306CR009, Modified UE Capability for CPCH	GBT + 25 companies	Noted	(*1)
150	28	R1-01-0288	RAN1 Views on UE Support for CPCH in Release 4	GBT	Noted	(*1) Day3 20:30-21:24

(*1) Mr. Joe Kwak (GBT) presented this CR(RAN WG2 CR in R2-010664).

This is embedded in RAN WG2 LS (**R1-01-0314**, R2-010740, See No.16). In the LS, RAN WG2 was requesting that RAN WG1 discuss the embedded CR and provide recommendations to RAN #11.

R1-01-0288 was reviewed in succession. This paper listed some points for consideration during the RAN WG1 discussion.

There were some concerns raised especially on the complexity aspects of CPCH. Major opinion was that the additional complexity does not justify the potential benefits at this point of time and we are not ready to consider the CPCH mandatory or as a reference configuration for release 4. There was another comment that stated that SF=512 is still open in RAN WG1 and therefore we cannot say it as mandatory.

Having these comments, chairman concluded that from RAN WG1 point of view we cannot say this as mandatory for the classes listed in RAN WG2 CR. He also pointed out that it is not quite obvious in RAN WG1 why there should be separate parameters for CPCH in R2-010664 depending on the UE classes.

Chairman remarked that he would mention about this to RAN 11 in his report.

There was also one question asking the meaning of the reference tables in TS 25.306.

/*** Day3 closed at 09:26 ***

On Day4, Mr. Joe Kwak (GBT) tried to explain **R2-010341** which is embedded inside of the incoming LS (**R1-01-0322**). Due to the lack of time, chairman encourage people to have a look at that document offline. Mr. Joe Kwak questioned whether it is possible to start the e-mail discussion on the RAN WG1 e-mail reflector. Chairman answered yes and supported e-mail discussion on this issue. Mr. Joe Kwak stated that GBT will kick off the e-mail discussion. Chairman remarked that he will report this in his report to RAN. (17:16-17:20)

Day 4, started at 08.42

8.8 TDD 1.28 Mchips functionality (Ad Hoc 21) Work Item Code : LCRTDD-Phys

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No.	CR	rev.	TS	Tdoc	Title	Cat	Source	Conclusion	Notes
151	-	-	-	R1-01-0376	TR 25.928 v1.1.2 1.28Mcps functionality for UTRA TDD Physical Layer	-	Siemens	Approved	No Comments Day4 09:39
152	006	1	25.201	R1-01-0377	Inclusion of 1.28Mcps TDD in TS 25.201	В	CWTS/CATT Siemens	Approved	No Comments _{Day4 09:41}
153	043	1	25.211	R1-01-0371	Inclusion of 1.28Mcps TDD in TS 25.221	В	Siemens CWTS/CATT	Approved	No Comments _{Day4 09:43}
154	055	1	25.222	R1-01-0372	Inclusion of 1.28Mcps TDD in TS 25.222	В	Siemens CWTS/CATT	Approved	No Comments _{Day4 09:45}
155	017	1	25.223	R1-01-0373	Inclusion of 1.28Mcps TDD in TS 25.223	В	Siemens CWTS/CATT	Approved	No Comments _{Day4 09:47}
156	047	1	25.224	R1-01-0374	Inclusion of 1.28Mcps TDD in TS 25.224	В	Siemens CWTS/CATT	Approved	No Comments _{Day4 09:49}
157	024	1	25.225	R1-01-0375	Inclusion of 1.28Mcps TDD in TS 25.225	В	Siemens CWTS/CATT	Approved	No Comments _{Day4 09:51}
158	005	1	25.944	R1-01-0255	1.28 Mcps TDD related changes to 25.944	В	Siemens CATT	Approved	No Comments Day4 09:53

All following documents/CRs had been basically reviewed in Ad Hoc 21 session on Day1. (See section 7)

8.9 Tx-diversity (Ad Hoc 26)

8.9.1 Ad Hoc 26 meeting

The actual Ad Hoc meeting took place on Day 3 night. (Day3 21:45 - 22:30)

8.9.2 Report from Adhoc 26: Transmit diversity with more than 2 antennas (R1-01-0418) Source : Ad Hoc 26 chairman (Day4 12:30-12:33)

Two documents(**R1-01-0287**, **R1-01-0335**) had been presented at this AH26. They had been noted. The remaining documents including text proposal to the TR could not be treated and were left for presentation in the plenary.

Remaining papers are as follows.

Text proposals:

- R1-01-0203 Description of the eigenbeamformer concept (update) and performance evaluation,, Siemens
- R1-01-0204 Text proposal for WG 1 report on Tx diversity for multiple antennas, Siemens
- R1-01-0370 Proposed TR of Tx diversity for multiple antennas, Samsung
- R1-01-0404 Text proposal for WG 1 report on Tx diversity for multiple antennas on general issues, Nokia, Siemens

Discussion papers:

- R1-01-0394 Further comments on transmit diversity schemes, Lucent
- R1-01-0276 Closed Loop Mode Transmit Diversity for DSCH in Soft Handover, NEC

Ad Hoc report was approved with no comments.

Chairman remarked that from TSG RAN point of view it would not be a issue whether we have these remaining paper covered in this meeting or not. The main thing is to schedule Ad Hoc meeting in May on this topic. He stated that in case we would not have time in the afternoon to discuss these issues, e-mail discussion would be highly encouraged.

9. Approval of the liaison statements as output from WG1

No.	Discussed Tdoc	Source	To/Cc	Title	Approved Tdoc	Notes
159	R1-01-0388	Siemens	R2 C:R3	LS about IPDLs in UTRA-TDD	R1-01-0415	No (*1) Comments Day4 09:23
160	R1-01-0393	Vodafone	R2	Response to LS on Default configurations	R1-01-0421	(*2) _{Day4 11:10}
161	R1-01-0339	Nortel	S4 Cc:R2	Response LS to "LS on TSG-SA4 request for information with regard to RAN handling of bit erroneous SDUs within packet switched domain radio bearers" (S4-000652)	R1-01-0426	No (*3) Comments Day4 16:48
162	R1-01-0425	Drafting Group	R2 Cc:RAN	Recommendations on HSDPA	R1-01-0427	(*4) _{Day4 17:12}
163	R1-01-0412	Samsung	R2,R3,R4	LS on revision of TR 25.840 "Terminal Power Saving Features" to v2.3.0	R1-01-0429	(*5) _{Day4 17:29}
164	R1-01-0356	Nokia	R3	LS on DL transmit power setting during UL out-of-synch	R1-01-0431	(*6) _{Day4 17:37}

(*1) Mr. Siegfried Bär (Siemens) presented this LS. (See No. 86)

(*2) Mr. Yannick Le Pezennec (Vodafone) presented this LS. (See No. 26)

Mr. Dirk Gerstenberger (Ericsson) suggested that somewhere in the LS it should be mentioned that in general RAN WG1 feels that the parameters should be aligned to TS 34.108.

Chairman agreed to this comment and asked proponent to add this statement.

Chairman also asked the proponent to post this LS on the RAN WG2 e-mail reflector as soon as possible.

(*3) Ms. Evelyne Le Strat (Nortel) presented this CR. (See No. 13)

(*4) See No. 148

(*5) Mr. Ju Ho Lee (Samsung) presented this LS.

Chairman suggested to remove the CRs attached.

Mr. Dirk Gerstenberger (Ericsson) remarked that the following first phrase in the 2nd paragraph should be removed. He stated that it is clear that we have not concluded on SSDT solution.

Although gating is now going to be stable through revision to version 2.2.0,

(*6) Mr. Markku Tarkiainen (Nokia) presented this LS. (See No. 43)

Mr. Dirk Gerstenberger (Ericsson) remarked that the first bullet point (see below) should be removed. *a radio link is initially setup on a frequency i.e. the radio link set it belong to is in initial state*

10. Closing

Chairman introduced Joint Ad Hoc meeting in May and stated as follows.

I think inputs on those topics that really span between the working groups are encouraged. Especially we should confirm the view of RAN WG2 on the signalling aspects for example. I think signalling is something which is pretty much between RAN WG1 and RAN WG2. Those signalling aspects are recommended to be raised in this Ad Hoc in May so that after this Ad Hoc we could have clear vision what RAN WG1 should do on this issue and what to expect to RAN WG2 to do. I believe anyway from what I have seen on their report that RAN WG2 has pretty much acknowledged that there is a need of very fast signalling for the various features like AMC or HARQ. They do understand the need for physical layer signalling that is different from release 99. I guess this is something probably that needs to go into some more details. Probably on individual topics like MIMO for instance it is a topic that does not have great interaction with RAN WG2 directly. So at least on this MIMO issues probably we do not need to discuss in RAN WG2. Probably we need to have RAN WG2 issue sorted out on that first. So I think it will be on this HSDPA with AMC and HARQ that we that we should address. Those issues are spanning between RAN WG1 and RAN WG2.

Finally Chairman thanked hosting company (Motorola) for providing good environment and its hospitality. Meeting closed at 17:38 on March 2, 2001.

Meeting	Year	Month	Date	Location	Hosts
RAN WG1 #10	2000	January	18-21	China	Nokia
RAN WG1 #11	2000	February	29 – March 3	USA	T1P1
RAN #7	2000	March	13-15	Madrid, Spain	
RAN WG1 #12	2000	April	10-13	Korea	TTA
RAN WG1 #13	2000	May	22-25	Tokyo, Japan	NTT DoCoMo
RAN #8	2000	June	21-23	Dusseldorf, Germany	
RAN WG1 #14	2000	July	4-7	Finland	Nokia
RAN WG1 #15	2000	August	22-25	Germany	Siemens
RAN #9	2000	September	20-22	Hawaii	
RAN WG1 #16	2000	October	10-13	Pusan, Korea	Samsung, LGIC
RAN WG1 #17	2000	November	21-24	Stockholm, Sweden	Ericsson
RAN #10	2000	December	6-8	Bangkok, Thailand	Unisys
RAN WG1 #18	2001	January	15-18	U.S.A. Boston	North American Friends of 3GPP
RAN WG1 #19	2001	February	27 – March 2	U.S.A. Lasvegas	Motorola
RAN #11	2001	March	13-16	Palm Springs, CA U.S.A.	North American Friends of 3GPP
HSDPA Ad Hoc	2001	April	5-6	Sophia Antipolis with R2	
RAN WG1 #20	2001	May	21-25 (5days)	Pusan, Korea withR2,3	Samsung
RAN #12	2001	June	12-15	Stockholm, Sweden	Ericsson
Rel-5 Ad Hoc	2001	June	26-28	Helsinki, Finland	
RAN WG #21	2001	August	27-31(5days)	Turin, Italy	Host needed
RAN #13	2001	September	18-21	Beijing, China	Lucent, CWTS
RAN WG #22	2001	October	8-12	T.B.D.	Host needed
RAN WG #23	2001	November	19-23	T.B.D.	Host needed
RAN #14	2001	December	11-14	Kyoto, Japan	ARIB, TTC
RAN #15	2002	March	5-8	(Korea)	TTA
RAN #16	2002	June	4-7	(Europe)	Motorola
RAN #17	2002	September	3-6	(France)	Alcatel
RAN #18	2002	December	3-6	(U.S.A.)	North American Friends of 3GPP

11. WG1 meeting schedule in year 2000 -2002(Tentative)

Annex A : List of approved CRs (Approved in RAN WG1 #18 and #19 meetings)

1. CRs to Release 99 specifications / Technical Reports.

1. 1. TS 25.211

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.211	091	-	R1-01-0034	DSCH reading indication	F	Ericsson	18-11	RP-010058	3.5.0	3.6.0
2	25.211	092	1	R1-01-0368	Clarification of the S-CCPCH frame carring paging information	F	Panasonic	19-60	RP-010058	3.5.0	3.6.0
3	25.211	095	1	R1-01-0346	Phase Reference for Secondary CCPCH carrying FACH	F	Nokia	19-63	RP-010058	3.5.0	3.6.0
4	25.211	096	-	R1-01-0359	Uplink power control preamble	F	Ericsson	19-53	RP-010058	3.5.0	3.6.0

1. 2. TS 25.213

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.213	038	-	R1-01-0247	Clarification of channelization codes when SF=512	F	Siemens,	19-36	RP-010059	3.4.0	3.5.0
							Panasonic				
2	25.213	039	1	R1-01-0348	Clarification of the scrambling code of a power control preamble	F	Panasonic	19-56	RP-010059	3.4.0	3.5.0

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<u>1.3</u>	. TS 25.2	214									
No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.214	142	1	R1-01-0112	Uplink power control in compressed mode	F	Philips	18-27	RP-010060	3.5.0	3.6.0
2	25.214	144	-	R1-01-0052	Removal of the power balancing algorithm from TS 25.214	F	NEC	18-13	RP-010060	3.5.0	3.6.0
3	25.214	145	-	R1-01-0053	Clarification of Nid parameter – when SSDT and uplink compressed mode are in operation	F	NEC, Telecom Modus	18-14	RP-010060	3.5.0	3.6.0
4	25.214	146	-	R1-01-0085	Clarification of closed loop transmit diversity mode 1 and mode 2 operation during compressed mode	F	Motorola	18-15	RP-010060	3.5.0	3.6.0
5	25.214	148	1	R1-01-0352	Clarification of UE SIR estimation	F	Ericsson, Philips	19-57	RP-010060	3.5.0	3.6.0
6	25.214	150	1	R1-01-0357	Clarification of the order of SSDT signalling in 2 bit FBI	F	Panasonic	19-58	RP-010060	3.5.0	3.6.0
7	25.214	154	1	R1-01-0359	Uplink power control preamble	F	Ericsson	19-70	RP-010600	3.5.0	3.6.0
8	25.214	155	-	R1-01-0279	Correction of limited power raise	F	Ericsson	19-39	RP-010060	3.5.0	3.6.0
9	25.214	156	-	R1-01-0282	Clarification of initialisation procedure	F	Philips	19-37	RP-010060	3.5.0	3.6.0
10	25.214	158	-	R1-01-0285	Definition of power control step size for algorithm 2	F	Nokia	19-42	RP-010060	3.5.0	3.6.0
11	25.214	161	1	R1-01-0353	Correction of the UE behaviour in SSDT mode	F	Vodafone, Nokia	19-62	RP-010060	3.5.0	3.6.0
12	25.214	163	-	R1-01-0419	Correction on downlink synchronisation primitives	F	NTT DoCoMo	19-72	RP-010060	3.5.0	3.6.0

1.4. TS 25.215

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_ne
1	25.215	079	2	R1-01-0107	Correction of the observed time difference to GSM measurement	F	Nokia	18-28	RP-010061	3.5.0	3.6.0
2	25.215	081	-	R1-01-0071	Removal of UE SIR measurement	F	Ericsson	18-17	RP-010061	3.5.0	3.6.0
3	25.215	082	1	R1-01-0340	Correction of GSM reference	F	Panasonic	19-59	RP-010061	3.5.0	3.6.0
4	25.215	083	-	R1-01-0294	Correction of GPS Timing measurement	F	Ericsson	19-45	RP-010061	3.5.0	3.6.0
5	25.215	086	-	R1-01-0419	Correction on transport channel BLER	F	NTT DoCoMo	19-73	RP-010061	3.5.0	3.6.0

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1. 5.	TS 25.	221									
No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-	V_old	V_ne
1	25.221	033	2	R1-01-0350	Correction to SCH section	F	InterDigital	19-65	RP-010062	3.5.0	3.6.0
2	25.221	037	1	R1-01-0019	Bit Scrambling for TDD	F	Siemens	18-20	RP-010062	3.5.0	3.6.0
3	25.221	039	1	R1-01-0111	Corrections of PUSCH and PDSCH	F	Siemens	18-30	RP-010062	3.5.0	3.6.0
4	25.221	040	-	R1-01-0021	Alteration of SCH offsets to avoid overlapping Midamble	F	Siemens	18-31	RP-010062	3.5.0	3.6.0
5	25.221	041	-	R1-01-0022	Clarifications & Corrections for TS25.221	F	Siemens	18-32	RP-010062	3.5.0	3.6.0
6	25.221	045	1	R1-01-0379	Corrections on the PRACH and clarifications on the midamble generation and the behaviour in case of an invalid TFI combination on the DCHs	F	Siemens	19-67	RP-010062	3.5.0	3.6.0
7	25.221	046	-	R1-01-0265	Clarification of TFCI transmission	F	Siemens	19-46	RP-010062	3.5.0	3.6.0
8	25.221	048	-	R1-01-0341	Corrections to Table 5.b "Timeslot formats for the Uplink"	F	InterDigital,	19-66	RP-010062	3.5.0	3.6.0

1. 6. TS 25.222

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.222	051	1	R1-01-0019	Bit Scrambling for TDD	F	Siemens	18-21	RP-010063	3.5.0	3.6.0
2	25.222	054	1	R1-01-0242	Corrections & Clarifications for TS25.222	F	Siemens	19-48	RP-010063	3.5.0	3.6.0

1.7. TS 25.223

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.223	015	1	R1-01-0020	Code specific phase offsets for TDD	F	Siemens	19-31	RP-010064	3.5.0	3.6.0

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1.8. TS 25.224

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.224	036	-	R1-01-0153	DTX and Special Burst Scheduling	F	InterDigital	18-35	RP-010065	3.5.0	3.6.0
2	25.224	037	1	R1-01-0351	RACH random access procedure	F	InterDigital	19-69	RP-010065	3.5.0	3.6.0
3	25.224	045	-	R1-01-0016	Introduction of closed-loop Tx diversity for the PDSCH and DTX for the PUSCH/PDSCH	F	Siemens	18-19	RP-010065	3.5.0	3.6.0
4	25.224	046	2	R1-01-0358	Corrections of TDD power control sections	F	Siemens	19-68	RP-010065	3.5.0	3.6.0
5	25.224	050	-	R1-01-0209	Use of a special burst in reconfiguration	F	InterDigital	19-51	RP-010065	3.5.0	3.6.0
6	25.224	053	-	R1-01-0252	Known TFCI for the TDD special burst	F	InterDigital	19-50	RP-010065	3.5.0	3.6.0

1.9. TS 25.225

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.225	023	-	R1-01-0107	Correction of the observed time difference to GSM measurement	F	Nokia	18-29	RP-010066	3.5.0	3.6.0

1.10. TR 25.944

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.944	006	-	R1-01-0256	Corrections for TDD sections	F	Siemens	19-52	RP-010067	3.3.0	3.4.0

In total 42 CRs were approved in RAN WG1 #18 and #19 meetings for release 99.

2. CRs to Release 4 specifications / Technical Reports.

2. 1. Low chip rate TDD option (Physical Layer) – Work Item Code : LCRTDD-Phys

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.201	006	1	R1-01-0377	Inclusion of 1.28Mcps TDD in TS 25.201	В	CWTS/CATT Siemens	19-152	RP-010071	3.1.0	4.0.0
2	25.221	043	1	R1-01-0371	Inclusion of 1.28Mcps TDD in TS 25.221	В	Siemens, CWTS, CATT	19-153	RP-010071	3.5.0	4.0.0
3	25.222	055	1	R1-01-0372	Inclusion of 1.28Mcps TDD in TS 25.222	В	Siemens, CWTS, CATT	19-154	RP-010071	3.5.0	4.0.0
4	25.223	017	1	R1-01-0373	Inclusion of 1.28Mcps TDD in TS 25.223	В	Siemens, CWTS, CATT	19-155	RP-010071	3.4.0	4.0.0
5	25.224	047	1	R1-01-0374	Inclusion of 1.28Mcps TDD in TS 25.224	В	Siemens, CWTS, CATT	19-156	RP-010071	3.5.0	4.0.0
6	25.225	024	1	R1-01-0375	Inclusion of 1.28Mcps TDD in TS 25.225	В	Siemens, CWTS, CATT	19-157	RP-010071	3.5.0	4.0.0
7	25.944	005	1	R1-01-0255	1.28 Mcps TDD related changes to 25.944	В	Siemens, CATT	19-158	RP-010071	3.3.0	4.0.0

2. 2. UE positioning enhancement – Work Item Code : *LCS1-UEpos-enh*

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.215	085	-	R1-01-0411	RTD measurement in UTRAN for FDD	В	Nokia	19-91	RP-010072	3.5.0	4.0.0
2	25.221	044	-	R1-01-0226	Correction of beacon characteristics due to IPDLs	С	Siemens	19-87	RP-010072	3.5.0	4.0.0
3	25.224	048	1	R1-01-0389	Idle periods for IPDL location method	В	Siemens	19-90	RP-010072	3.5.0	4.0.0
4	25.225	025	-	R1-01-0229	RTD measurement in UTRAN for UP-TDD	В	Siemens	19-89	RP-010072	3.5.0	4.0.0

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2. 3. Node B synchronisation for TDD – Work Item Code : RANimp-NBsync

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.221	042	2	R1-01-0381	Introduction of the Physical Node B Synchronization Channel	В	Siemens	19-79	RP-010073	3.5.0	4.0.0
2	25.223	016	-	R1-01-0202	Cell synchronisation codes for R'4 Node B sync over air interface in UTRA TDD	в	Mitsubishi	19-77	RP-010073	3.4.0	4.0.0
3	25.224	044	2	R1-01-0383	Layer 1 procedure for Node B synchronisation	В	Siemens	19-81	RP-010073	3.5.0	4.0.0
4	25.225	022	-	R1-01-0013	Measurements for Node B synchronisation	В	Siemens	19-78	RP-010073	3.5.0	4.0.0
5	25.836	001	1	R1-01-0382	Additions to the node B synchronisation procedure	С	Siemens	19-80	RP-010073	4.0.0	4.1.0

2. 4. DSCH power control improvement in soft handover - Work Item Code : RInImp-DSCHsho

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.214	149	1	R1-01-0414	DSCH Power Control Improvement in soft handover	В	Nokia	19-85	RP-010074	3.5.0	4.0.0
2	25.841	001	1	R1-01-0380	TFCI power control for DSCH in split mode	В	LGE	19-84	RP-010074	4.0.0	4.1.0
				-	·						

2. 5. Correction type CR

No	Spec	CR	Rev	R1 T-doc	Subject	Cat	Source	Ref. No.	RAN T-doc	V_old	V_new
1	25.211	093	1	R1-01-0347	Application of beamforming and combination of beamforming with	F	Nokia	19-64	RP-010075	3.5.0	4.0.0
					TX-diversity on UTRA FDD downlink						

In total, 19 CRs were approved in RAN WG1#19 meeting for release 4.

Forename	Family Name	Company
Mirko	AKSENTIJEVIC	Nokia
Brenda	BACKWELL	Motorola
Uwe	BAEDER	Rohde & Schwarz
Siegfried	BAER	Siemens AG
Stephan	BAHRENBURG	Siemans Ltd. China
Sergio	BARBERIS	Cselt
Nader	BOLOURCHI	Motorola
Sarah	BOUMENDIL	Nortel
Frank	BURKERT	Siemens AG
Yuk	C CHOW	Toshiba Research Europe Ltd
Peter	CHAMBERS	Roke Manor Research Ltd.
Dong	CHEN	Siemens AG
Fang-Chen	CHENG	Lucent Technologies
Hyung-Nam	CHOI	Siemens AG
Ian	CORDEN	Lucent Technologies
Liliana	CZAPLA	InterDigital Communications Corp
Erik	DAHLMAN	Ericsson
Rosella	DE BENEDITAS	SIEMENS ICN S.p.A
Stephen	DICK	InterDigital Communications Corp
Jean-Aicard	FABIEN	Motorola
Toshivuki	FUTSUKATA	NTT DoCoMo
Greg	GARNER	Real Time Engineering
Jennifer	GARNER	Real Time Engineering
Dirk	GERSTENBERGER	Ericsson
Amitava	GHOSH	Motorola
Nandu	GOPALAKRISHNAN	Lucent
Nathalie	GOUDARD	Wavecom
Marc	GRIGUER	France Telecom
Michael	GUILBAUD	ALCATEL France
Nick	HALLAM-BAKER	SYMBIONICS Ltd
Kojiro	HAMABE	NEC
Andreas	HOEYNCK	Siemens AG
Henry	Horng	Mitsubishi Electric Co.
Jinling	HU	CWTS/CATT
Seung-Hoon	HWANG	LG Electronics Inc.
Shinobu	IKEDA	ETSI
Katsutoshi	ITOH	Sony Corporation
Bruno	JECHOUX	Mitubishi Electric
Farooq	KHAN	Lucent Technologies
Hunkee	KIM	Samsung Electronics Co.
Jaeheuns	KIM	Samsung Electronics Co.
Duk Kyung	KIM	SK Telecom
Young-Ju	KIM	LG Electronics Inc.
Bonghoe	KIM	LG Electronics Inc.
Shigenori	KINJO	Texas Instruments Japan Ltd
Dirk	KISTOWSKI	Deutsch Telekom Mobilnet
Janne	KOLU	Elektrobit Ltd
Frank	KOWALEWSKI	Siemens AG
Herbert	KRAUSS	Philips Semiconductors
Joe	KWAK	Golden Bridge Technology., Inc
Yongjun	KWAK	Samsung ElectronicsCo., LTD
Dominique	LACROIX	France Telecom
Jie	LAI	Wiscom Technologies

Annex B. The Participants List

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Forename	Family Name	Company
Kevin	LAIRD	Motorola
Alexander	LAX	3G.COM(UK) LTD
Yannick	LE PEZENNEC	Vodefone Group
Evelyne	Le STRAT	Nortel
Jeho	LEE	LG Electronics Inc.
Ju Ho	LEE	Samsung Electronics Co.
Chenguang	LI	CWTS/CATT
Feng	LI	CWTS/CATT
Stefan	LINDBERG	Ericsson LM
Rickard	LJUNG	Telia AB
Robert	LOVE	Motorola
Tsuneichi	MAKIHIRA	Mitsubishi Electric Co.
Frederick	MALMSTROM	Ericsson
Axel	MEILING	Siemens AG
Kenichi	MIYOSHI	Motorola
Yongsuk	MOON	Samsung Electronics
Tim	MOULSLEY	Philips
Kosuke	NAITO	NEC
Phong	NGUYEN	NEC Australia
Ilkka	NIVA	Nokia – Japan Co. Ltd.
Stefan	OESTREICH	Siemens
Yukihiko	OKUMURA	NTT DoCoMo
Alessandro	PACE	Telecom Italia Mobile
Carlo	PALESE	St Microelectronics
Seong Soo	Park	SK Telecom
Kourosh	PARSA	Golden Bridge Technology., Inc
Agin	PASCAL	Alcatel
Mark	PECEN	Motorola
Jean-Hughes	PERRIN	Alcatel BS
Olaf	POLLAKOWSKI	Siemens AG
Seshaiah	PONNEKANTI	Fujitsu Telecom Europe
Marcus	PURAT	Siemens AG
Robert	QIU	Wiscom Technologies
Marian	RUDOLF	Mitsubishi Electric
Ashok	RUDRAPATNA	Lucent Technologies
John	SADOWSKY	Intel Corporation
Ashwin	SAMPATH	Lucent Technologies
Marzia	SAPIENZA	St Microelectronics
Masanori	SATO	Sony Corporation
Michael	SCHNEIDER	Infineon Technologies AG
Hiroyuki	SEKI	Fujitsu Laboratories Ltd.
Christian	SENNINGER	Siemens AG
Minesh	SHETH	Golden Bridge Technology., Inc
Young Joon	SONG	LG Electronics
Gerke	SPALING	ERICSSON L.M.
Ville	STEUDLE	Nokia
Marvin	SU	LaverOne Wireless Technology
Hsuan-Jung	SU	Lucent Technologies
Hidetoshi	SUZUKI	Panasonic
Michiaki	TAKANO	Mitsubishi Electric Corporation
Nahoko	TAKANO	NEC
Markku	TARKIAINEN	NOKIA Corporation
Said	TATESH	Lucent Technologies
Antti	TOSKALA	Nokia
Stenhen	TRUELOVE	Telecom Modus
phon		

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Forename	Family Name	Company
Mathieu	Villion	Motorola
Jingyu	WANG	CWTS/CATT
Christian	WENGERTER	Panasonic
James	WHITEHEAD	AT&T Communications Services
Ralf	WIEDMANN	Siemens AG
Andreas	WILDE	Ericsson
Serge	WILLENEGGER	QUALCOMM
Yukun	WU	CWTS/CATT
Aiguo	YAN	Aanlog Devices Inc.
Guiliang	YANG	CWTS/CATT
Jaeseung	YOON	Samsung Electronics
Han il	YU	Samsung Electronics Co Ltd
Ariela	ZEIRA	Motorola
Donald E.	ZELMER	Cingular Wireless LLC
Sen Lin	ZHANG	BT Cellnet

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Appendix E

R2-072901xxxx

(TSG-RAN WG2 meeting #58bis 25-29 June 2007, USA)

Title:	Draft ²⁰ minutes of the 58th TSG-RAN WG2 meeting
	(Kobe, Japan, 07-11 May 2007)
Document for:	Approval Comments
Source:	3GPP support team



(courtesy of Masato Kitazoe)

Please send your last comments by the 15th June 2007

15th May 2007 *Last updated 22nd June 2007.* Claude Arzelier ETSI Mobile Competence Centre F-06921 Sophia Antipolis Cedex Tel: +33 4 92 94 42 61 Email: Claude.Arzelier@etsi.org

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6 S	tudy Item on 3G Home NodeB (LTE & UTRA)	<u>929291</u>
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	-	

1 Opening of the meeting

1.1 Call for IPR

Sugiyama-san from Fujitsu welcomed the participants to Kobe in the name of the Japanese firends of 3GPP. Mr. Denis Fauconnier (Chairman) opened the meeting at 09.00 am.

The Chairman made the following IPR call:

The attention of the delegates of this Working Group was drawn to the fact **that 3GPP Individual Members have the obligation** under the IPR Policies of their respective Organizational Partners to **inform their respective** Organizational Partners **of Essential IPRs they become aware of**.

The delegates were asked to take note that they were hereby invited:

- to investigate whether their organization or any other organization owns IPRs which were, or were likely to become Essential in respect of the work of 3GPP.
- to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Statement and the Licensing declaration forms (<u>http://webapp.etsi.org/lpr/</u>).

NOTE: IPRs may be declared to the Director-General or Chairman of the SDO, but not to the RAN WG2 Chairman.

2 Approval of the agenda

R2-071610 Agenda RAN2-58 Denis Fauconnier (Chairman) proposed the agenda for the meeting. **Decision:** The agenda was approved.

3 Minutes from the previous meetings

R2-072131 (Draft1) Minutes of RAN2-57bis, Malta, 26-30 March 2007 The minutes were approved.

4 UTRA/UTRAN Long Term Evolution

4.1 Incoming LSs on LTE

Discussion:

R2-072101 (0 R2-072128 (3 These document v Discussion: Decision: The LS	GP-070138, Cc RAN2). LS on the continuity of voice calls between LTE and GERAN/UTRAN S2-072264, Cc RAN2). Reply LS to GERAN – LTE interworking vas presented by Masato Kitazoe from Qualcomm. s were noted.	GERAN SA WG2
R2-072102 (I The document wa Discussion: Decision: The LS	R1-071806, Cc RAN2). LS on Agreement on UL Inter-cell Power Control s presented by Magnus from Ericsson. was noted.	RAN WG1
R2-072103 (I The document wa	R1-071838, to RAN2). LS on random access procedure parameters s presented by Benoist Sebire from Nokia Siemens Networks.	RAN WG1

6

RAN2 Chairman

ETSI MCC

This has an impact on MAC/RRC. **Decision:** The LS was noted.

R2-072104 (R1-071839, to RAN2). LS on target quality on L1/L2 control channel The document was presented by Gert-jan van Lieshout from Samsung.	RAN WG1
Is not 1% of the throughput lost, as a consequence ? It was clarified that this is the cell edge performance, cell center can be Decision: The LS was noted. This will be captured in the stage 2.	be much better.
R2-072105(R1-071940, to RAN2). LS on Layer-1-related system informationThe document was presented by Antonella from Alcatel-Lucent. Discussion:Decision: The document was noted.	RAN WG1
R2-072112 (R3-070720, to RAN2). LS on IP multi-cast for S1-AP messages The document was presented by Anders from Ericsson. Discussion: Decision: The document was noted.	RAN WG3
R2-072113 (R3-070729, to RAN2). LS on data forwarding for IRAT Handover R2-072119 (S2-072279, to RAN2). Reply LS (to S2-072093) on data forwarding for IRAT Handover The documents were presented by Kim from Samsung. Discussion: Decision: The document was noted.	RAN WG3 SA WG2
R2-072116 (S2-072230, Cc RAN2). Reply LS (to R3-070509) on EPC update at inter eNodeB mobility The document was presented by Richard Burbidge from Motorola. Discussion: Decision: The document was noted.	SA WG2
 R2-072117 (S2-072275, to RAN2). LS on the need of in sequence data delivery The document was presented by () from Motorola. Discussion: Ciphering in PDCP, transfer of PDCP sequence numbers: Are SA2/SA3 aware of the assumptions/decisions ? Question 3 is internal to the RAN. Decision: The document was noted. 	SA WG2

Draft1 minutes of the 58th TSG-RAN WG2 meeting	
R2-072120 (S4-070314, to RAN2). Reply LS (to R2-071104) on Rate-Adaptive Real-time Media The document was presented by Gert-jan van Lieshout from Samsung.	SA WG4
There would be performance benefits in a tighter control of the application. Will SA4 specify this (e.g. for specify an in-band functionality, instead ? Decision: The document was noted. LS to SA4 in RP-072133 (T-Mobile). To SA4, SA2, SA1.	r the initegrity phone case), or should RAN2
R2-072121 (S3-070280, to RAN2). Reply LS (to R2-071105) on Verification of security principles The document was presented by Benoist Sebire form Nokia Siemens Networks. Discussion:	SA WG3
AKA can be run in the background (because transparent to RAN2). However, the key needs to be changed What was the motivation for the change of the security architecture ? The security procedures (e.g. key change) need to be addressed in RAN2. Decision: The document was noted. Reply LS in R2-072134 (Qualcomm).	d in the Node-B when K-ASME is changed.
R2-072123 (R3-070732, to RAN2). LS on LTE MBMS and PDCP The document was presented by () from Ericsson. Discussion: PDCP header compression was agreed last time. Hence, location in the gateway. Multicast for SFN opera Full header compression carried on the S1. Decision: The document was noted. Reply LS in R2-072135 (Ericsson).	RAN WG3
(S2-072265, to RAN2). LS on E-UTRAN Idle mode downlink packet buffering and initiation of net R2-072125 service request The document was presented by Ravi Kuchibhotla from Motorola. Discussion: The terminology "gateway" was updated in SA2. Decision: The document was noted.	work triggered SA WG2
R2-072110 (R3-070700, Cc RAN2). LS on NAS Handling during intra-LTE handover The document was presented by Sudeep Palat from Alcatel-Lucent. Discussion:	RAN WG3
Decision: The dodument was noted.	
R2-072126 (R1-071837, to RAN2). LS on Physical Layer Depadding	RAN WG1
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Discussion:	
This deserves a joint session (at six o' clock in the morning).	
Decision: The document was (amusingly) noted.	
R2-072143 (R1-072549, to RAN2). Reply LS on uplink VoIP scheduling	RAN WG1
The document was presented by Mikio () from DoCoMo.	
Discussion:	
Decision: The document was noted.	
(R4-070778, Cc RAN2). Reply LS (to R1-071250) on LTE measurements supporting	
R2-072172 mobility	RAN WG4
The LS was postponed for the next meeting.	
R2-072303 (R3-071174, to RAN2). LS on RAN WG3 updates to 36.300	RAN WG3
The document was presented by Benoist Sebire from Nokia Siemens Networks.	
Discussion:	

Decision: The CR was agreed in R2-072333, CR 0001. An update of the CR was endorsed over the RAN3 reflector and then agreed over the RAN2 reflector following the meeting. The CR was revised into:

	Changes to management-, handover-, paging- and NAS functions, node-						
	synchronization, X2 UP protocol stack, X2 inter cell load management, IP						
<u>R2-072344</u>	fragmentation, intra-LTE HO, and TA relation to cells in eNB	<u>CR</u>	<u>0001</u>	1	36.300 Rel-8	-	RAN WG3

That was agreed over the reflector.

4.2 Items treated in e-mail discussion (rapporteur report only)

R2-072132 Report of email discussion point 2: LTE System performance The document was presented by Vera () from Ericsson. Discussion: Decision: The document was noted.	Ericsson
R2-071808 Summary of email discussion on cell reselection parameters in LTE The document was presented by Magnus () from Ericsson. Discussion:	Ericsson

0.5% of probability of collision was assumed. One typical scenario may be one slot per 10ms. **Decision:** The document was noted.

R2-072072 Report of email discussion on Home eNodeB Requirements (Point 8) The document was presented by Dave Fox from Vodafone.

Vodafone Group

Vodafone Group

Discussion:

Point 9, second sequence: It was clarified that the intention was for the UE to indicate to the network that it is in the coverage of a Home eNodeB. What if the same band is used ? Common gaps may be necessary.

The macro layer refers to a layer above the Home eNodeB. The difference is Closed User Group. So, the terminology could be based on the words User Group (e.g. Closed User Group Cells, or Private Cells). Anyhow, the terminology "Home" is misleading here.

There could be coordinated or not coordinated deployments.

One solution would be to use a SIM-based mechanism (Closed User cells to be indicated in the broadcast. The UE may try to access the cell only if the UE belongs to the corresponding user Group, in the SOLSA way).

There are two scenarios:

- Closed User Group refers to a (network operator-) coordinated deployment.

- Home eNodeB refers to an uncoordinated deployment of eNode B at Home.

What are the requirements on registration/rejection/access ? Depending on this, Home NodeB and Private Cells may be based on a similar Closed User Group solution.

Decision: The document was noted. The document was revised in R2-072139 (Vodafone):

R2-072073 Report of Email Discussion on MBMS definitions (Point 3)

The document was revised before presentation in R2-072137, but R2-072073 was presented.

The document was presented by Dave Fox from Vodafone Group.

Discussion:

The definitions encompass UTRAN, however there is still one "eNodeB" in the first paragraph.

Difference between R2-072073 and R2-072137 is on the MBSFN definition.

The reserved cell is not related to the MBMS transmission.

Could not the reserved cells have an impact on the mobility procedures due to cell coverage shrinking ?

The diagram is incorrect: MBMS reserved cells can be or not be part of the MBSFN area.

Cells are simply either transmitting or not in the MBSFN area. Is this worth creating new definitions ?

On the network interface:

- Any cell in the cluser will receive U-Plane and C-Plane.

- Reserved cells will receive C-Plane only.

The document was presented by Dave Fox from Vodafone Group.	
The wording "transmitting the service" seems unclear	
- "MBMS area Transmitting and advertising" will be used insted.	
- "MBMS area transmitting only - ffs".	
Decision: The document was noted. The update will be incorporated later-on in the Stage 2	2. Update of this document in R2-072148 (Vodafone).
R2-072074 Report of email discussion on UE State during MBMS Reception (Point 1) The document was presented by Dave Fox from Vodafone Group.	Vodafone Group
Differences in performance between proposal 2 using x mobiles and proposal 2 using 1 mo	shile (noint-to-point) should be understood
Decision: The document was noted.	one (point to point) should be understood.
Note: Parallel sessions. Minutes onwards regarding clause 4 taken by the RAN2 Chai	rman.
R2-072001 [Point #5] System Information Delivery - E-mail Report	Rannorteur
The document was presented by Ravi Kuchibhotla from Motorola.	Rapportour
Discussion:	
Decision: The document was noted.	
R2-072148 Report of email discussion on MBMS definitions (Point 3)	Vodafone Group
Discussion:	
Decision: agreed.	
P2 072130 Poport of amail discussion on Home aNodeR Populiroments (Point 8)	Vodafono Group
The document was presented by Dave Fox from Vodafone.	
Discussion:	
Decision: agreed.	
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R2-072142 Home eNodeB definitions

It was clarified that the sentence "Cells within the MBSFN area may or may not..." is meant to say that cells may transmit the user plane but not advertise the service.

Decision: The document was noted. No specific name for cells not in the MBSFN area. Revised in R2-072142:

Vodafone Group

R2-072184 Proposed way forward for E-MBMS based on Proposal 2 The document was presented by Dave Fox from Vodafone Group. **Discussion:**

Decision:

PTM-MC: uses MCH, scheduled by the MCE, PDCP in the Gw PTM-SC: uses DL-SCH, scheduled by the eNB

Proposal:

- PTM-SC and DL-SCH: allocate to multiple UEs a dedicated feedback channel (ACK-NACK & CQI) identical to Unicast case; allowing HARQ; these multiple UEs receiving/ACK-NACKing the Multi-cast transmissions. eNB can schedule re-transmissions on DL-SCH, also sent Multicast and recombined by the UE.
- PTP is not supported
- Feed-back for PTM-MC is FFS.

UEs who are allocated a feedback channel but no S1 for Unicast have a RRC connection which has the following characteristics:

- UE has a RNTI
- UE measurement reports
- No Handover prep, just cell change order
- RRC connection is not maintained at cell change i.e. a new one will need to be established if needed
- Indication to target cell of new UE in order to speed up MBMS availability? FFS

UEs who are allocated a feedback channel and S1 connected for Unicast have a RRC connection which has the following characteristics:

Normal mobility. Transfer of MBMS context on X2 TBD

End of decision

4.3 Endorsement of latest version of the stage 2

R2-071712 Stage 2 Update

The document was presented by Benoist Sebire from Nokia.

Discussion:

Should all the UE capability contributions be included in the annex, or not ? Clause 12 will be double-checked. **Decision:** The proposed changes were endorsed except clause 12. Contribution for clause 12 is in R2-072147.

R2-072147 Update of Stage 2 Clause 12

The document was withdrawn (not available). The changes will be done by the rapporteur in the update of the Stage 2 that will be sent on the reflector.

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Vodafone Group

Nokia Siemens Networks

Motorola

(Rapporteur)

4.4 Performance verification

R2-071810 LTE Performance verification – U-plane and C-plane latencies The document was presented by Magnus from Ericsson. Discussion:	Ericsson, Motorola, Nokia, Nokia Siemens Networks, Samsung, NEC	
Decision: The document was noted. The TR will be updated with this proposal. A CR	R will be presented to the plenary (source: RAN2). See R2-072	146.
R2-071869 LTE C-plane + U-plane latency analysis for TDD frame structure type 2 The document was presented by Haiyang Quan from Datang. Discussion:	CATT	
All in 1ms frame durations would make the solution simpler. Decision: The document was noted. All (FDD and all TDDs) will be in 1ms frame du	aration. Re-doing of calculations and merge is necessary.	
R2-071920 LTE Performance verification for TDD – U-plane and C-plane latencies The document was presented by () from IPWireless. Discussion:	IPWireless	
Decision: The document was noted. R2-071810, R2-071869, R2-071920 will be merged	ged in a LS to RAN Plenary. In R2-072146. (Ericsson):	
R2-072146 LTE U-plane and C-plane latencies The document was presented by Magnus () from Ericsson. Discussion:	LS xxxx Ericsson	
Decision: The document was noted. R2-071810, R2-071869, R2-071920 will be merged	ged in a LS to RAN Plenary. In R2-07 <u>21872146</u> . (Ericsson):	
R2-071811 LTE Performance verification – Handover latency The document was presented by Magnus () from Ericsson.	Ericsson, Nokia, Nokia Siemens Networks, Samsung, NEC Mr. Janne Peisa	

Discussion:

1

SFN neighbour cell knowledge is needed for the neighbour cell detection. This is based on FDD only so far.

Decision: The document was noted. A CR on 25.912 will be produced (Ericsson).

4.5 System Information content & delivery

R2-071968 P-BCH Transmission Interval in LTE The document was presented by Mikio Iwamura (...) from DoCoMo. **Discussion:**

SFN usage

- DRx reference
- RACH, especially in the case of 1.25MHz (tbd)
- BCCH cycle reference
- paging
- Reference for frequency hopping (tbd)
- Timing for L1/L2 control channels
- CQI & sounding reference allocation

Is it needed to read P-BCH for inter-frequency measurement report? This is FFS.

Decision: The P-BCH is sent every 40ms (working assumption). If later studies show that this is too long, this will be revisited towards 20ms. The PLMN list is sent on D-BCH every 80ms. This will be captured in the stage 2

R2-071815 Transmission of BCH R2-071814 The content and timing of BCH Noted without presentation	Ericsson Ericsson	Mr. Janne Peisa Mr. Janne Peisa
R2-071768 System information contents and the periodicity for No NCL Noted without presentation	Panasonic	
R2-071763 Structure of BCH Noted without presentation	QUALCOMM Europe	Dr. Nathan Tenny
R2-071702 SFN Synchronization without BCH bits for LTE – Latency Reduction Options The document was presented by Prem Sood () from Sharp. Discussion:	SHARP corporation	

Decision: The SFN is sent on the P-BCH, the proposal is not agreed. RAN1 should be informed of the decision.

R2-072010 Operator's view on neighbour cell information The document was presented by Mikio Iwamura (...) from DoCoMo. **Discussion:**

NTT DoCoMo, Vodafone, Telecom Italia, T-Mobile, Orange

NTT DoCoMo, Inc., NEC

Decision: Principle of alternative 1 from the conclusion is the agreed solution i.e. agreement follows: Active mode mobility relies on detected cells for intrafrequency case. A specific offset is defined for each neighbour cell, and it is common for Idle and Connected mode mobility. It is sent on P-BCH and decoded by UEs for both idle & active mode. Explicit NCL are still FFS. A LS will be sent to RAN4 informing them of our status and asking whether there is a benefit to assist the cell detection for e.g. tunnel; by e.g. providing explicitly certain cells (can be intra, inter, inter-RAT...).

R2-071785 Neighbour cell reduction using LCV

Huawei

The document was presented by Michael Roberts (...) from Huaweï.

Discussion: The scheme is optionally used for cases where there are many "black listed" cells, but the LCV on the P-BCH would be reserved even if the scheme is not used.

Decision: noted, Huaweï needs to convince delegates offline since people try to understand the scheme and its benefits.

R2-071762 Scheduling of D-BCH The document was presented by Nathan () from Qualcomm. Discussion: .is there really an issue for low cycle broadcast? It remains predictive Decision: noted	QUALCOMM Europe	Dr. Nathan Tenny
R2-071813 Scheduling of System Information The document was presented by Vera () from Ericsson. Discussion: Decision: noted	Ericsson	Mr. Janne Peisa
R2-071911 System information structure (with TP) The document was presented by Himke () from Samsung. Discussion: .	Samsung	Mr. Himke van der Velde
 Decisions: SU1 is sent on the D-BCH No need for secondary BCH Periodicity of SU-1 is 80ms; it contains the PLMN list. 		

- SU1 contains a scheduling block providing the periodicity for all the SU-n>1.
- SU1 contains the mapping of SIBs into SUs, dynamic, or mapping of SIBs into SUs is fixed in the standard. This is FFS.
- SU1 contains a value tag for each individual SU or (MIB or SU1) contains a value tag for all the SUs (FFS which of the solutions is selected).
- SU-1 is in the following sub-frame of P-BCH.
- Unicast DL-SCH transmissions can take place in parallel to SUs transmission, using L1/L2 control channel.
- Maximum D-BCH rate = minimum UE capability; Maximum D-BCH rate has to be studied. => RAN1

- SUs can be segmented, in which case each segment is sent in the next sub-frame as the previous one i.e. continuous time transmission (RB can vary using L1/L2 control channel)
- Whether SUs are contiguous (in a row) is FFS (benefit of continuous transmission is UE battery saving)
- Can eNB send different SUs is the same sub-frame? We need to ask RAN1
- LS to RAN1 will be written by Samsung
- Information on P-BCH is called MIB
- Samsung will capture the agreement in a text proposal

End of decisions

R2-071739 noted withour	System Information Change Indication t presentation	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire
R2-071759 noted withou	Neighbour Cell List Considerations t presentation	Nokia, Nokia Siemens Networks	
R2-071738 R2-071769 R2-071770	Procedure for Reading Scheduling Units System information reception for Inter-frequency mobility Cell reselection before call setup procedure	Nokia, Nokia Siemens Networks Panasonic Panasonic	Mr. Benoist Sébire
R2-071870 R2-071912 All noted wit	Notification scheme for system information Change System information scheduling and change notification hout presentation	CATT Samsung	Mrs. Haıyang Quan Mr. Himke van der Velde
R2-072183 The documen Discussion: Decision: Th	LS to RAN1 on System Information at was presented by GJ () from Samsung. e LS was approved	Samsung	

4.6 Random access procedure

R2-071906 Access Service Classes in LTE The document was presented by GJ (...) from Samsung.

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Samsung

Mr. Gert-Jan van

Lieshout

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Discussion: . Decision: The current understanding in RAN2 is that ASC concept is not needed. It wLTE, a document will have to show that it is necessary.	vill be removed from the Stage 2. If one c	ompany wants to have it for
R2-071732 Differential RACH Access based on Access Classes The document was noted without presentation	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire
R2-071681 Urgent Non-urgent split of RACH signatures in E-UTRA The document was presented by XX () from TI. Discussion: Decision: 3 companies support the proposal, 6 companies believe that there is no gain companies of the benefits of the proposed scheme.	Texas Instruments Inc n from the proposal. The proposal is noted	l, TI has to convince
R2-071817 Solution for sending NAS together with RRC connection request The document was presented by Magnus () from Ericsson. Discussion: Decision:	Ericsson	Mr. Janne Peisa
R2-071664 Discussion on contents of message 3 The document was presented by Sudeep () from Alcatel-Lucent. Discussion: Description: RAN2 will work on a model whereby Mag2 will have the TMSL + according	Alcatel-Lucent, Samsung	tigata tha LIE Tha TMSI will
also be part of the RRC message so that it can be used for contention resolution, and will be sent to SA2, SA3 CC CT1 (written by Alcatel-Lucent)	is used to route the establishment towards	the appropriate MME. A LS
R2-071626 RACH retransmission number The document was presented by Jin-Sock () from NEC. Discussion: Decision: noted	NEC	Mr. David Lecompte
R2-071771 Remaining issues on Random Access procedure usage The document was presented by XX () from Panasonic. Discussion:	Panasonic	
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R2-072033	Message 2 transmission when a dedicated preamble used	Samsung	
R2-071726	Non-contention based Handover	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire
R2-071674	Use of short C-RNTIs in message 2	LG Electronics Inc.	Mr. Patrick Fischer
R2-071939	Optimization for message 2 transmission	LG Electronics Inc.	
R2-071923	Discussion on Message 4 in Random Access	LG Electronics Inc.	
R2-071673	Transport format and power headroom in preamble Retransmission	LG Electonics Inc.	Mr. Patrick Fischer
R2-071938	Clarification on RA procedure	LG Electronics Inc.	
R2-071970	Contention Resolution and Initial Random Access	TD Tech Ltd.	
R2-071991	Content of Message 2	QUALCOMM Europe	
R2-072035	Optimization of contentio resolution in aRACH	Samsung	
R2-072048	Issues related to RACH access preamble	ASUSTeK	
R2-072050	Consideration related to Random Access Response	ASUSTeK	
R2-072084	Management of Dedicated Signatures	LG Electronics Inc., Samsung	
R2-072088	UE Identity Validity in RA Procedure	ASUSTeK	
R2-072089	Issues on Random Access Procedure	ASUSTeK	
R2-072090	Random and dedicated preamble based RACH access in E-UTRAN	IPWireless	
R2-072096	Consideration related to Contention Resolution	ASUSTeK	
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All were noted without presentation and will be studied in future meetings when discussing the stage 3 of RACH procedure

4.7 UL scheduling optimisations for VoIP (RAN1 reply LS needed)

R2-071840 ROHC Compliant Scheduling

The document was presented by <u>Mr. SeungJune YiSunjung (...)</u> from LGE. **Discussion:**

Decision: The proposal is not agreed, the same ROHC principles as UTRA is assumed i.e. no control of ROHC internal parameters by RRC

R2-071994 Impact of HARQ Termination Statistics on UL VoIP Capacity

The document was presented by Alex (...) from Qualcomm.

Discussion: Adaptivity for retransmissions is to maintain contiguous free resources in UL. UL HARQ operating point is higher than DL. **Decision:** optimisations should allow for a high number of retransmissions

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LG Electronics Inc.

QUALCOMM Europe

Draft1	minutes	of the	58 th	TSG-R	AN WO	G2 mee	ting

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R2-072062 The document Discussion: Decision: note	The need for uplink enhancement was presented by xx () from Samsung. d	samsung	
R2-072143 F The document Discussion: Decision: note	Reply LS on uplink VoIP scheduling was presented by Jinsock <u>Lee from NECx () from LGE.</u> d	RAN WG1	
R2-071818 I The document Discussion: Decision:	DRX control for LTE_ACTIVE and VoIP was presented by Magnus () from Ericsson.	Ericsson	Mr. Janne Peisa
R2-071961 U The document Discussion: W Decision: Dete define anything stage 3, but no	Jplink VoIP Scheduling with Fast Indication was presented by XX () from RIM. /hat is the benefit vs a Nw detection? We should not have the lower ection of silences can be done in the eNB, eNB may have some know g in the UE. Buffer Status reports could be optimised to support VoI ad-hoc mechanism is defined, it will have to remain a generic mech	RIM layers of the UE knowing the applica vledge of the application by use of the P, e.g. for transitions from silence to anism.	Mr. Gordon Young tion layer. e Label, and there is no agreement to speech, this will be studied in the
R2-071995 (The document Discussion: Decision: note	On Uplink Scheduling for VoIP was presented by Alex () from Qualcomm.	QUALCOMM Europe	
Discussion sur be achieved by persistent dyna	nmary: RAN1 requested RAN2 to reduce the signaling overhead vs y semi-persistent dynamic only if the HARQ operating point is below unic may not provide the expected gains and only the group mechan	dynamic non adaptive by a factor 4 to v 1.25 i.e. 25% retransmissions. So it ism.	o reach maximum capacity. This can f it si above this value, semi-

R2-072002	UL VoIP Scheduling	Motorola	
R2-071742	UL VoIP Capacity for Semi-persistent Scheduling and Group Scheduling	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire
R2-071744	Synchronous adaptive HARQ for E-UTRAN UL	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire

Noted without presentation

Final discussion & decision: 14 Companies voted in favour of Semi-persistent scheme, 7 in favour of a group mechanism, one expressed the view that we shoud wait. As a result, the Semi-persistent scheme was selected, and the group reviewed R2-071745 to capture the agreement

R2-071745 Text Proposal for UL Scheduling The document was presented by Benoit Sebire (...) from Nokia. Discussion: Decision: agreed text will be in R2-071745

R2-071745 Text Proposal for UL Scheduling The document was presented by Benoit Sebire (...) from Nokia. Discussion: Decision: agreed CATT, Elektrobit, Ericsson, Fujitsu, ITRI, LGE, Mitsubishi, Nokia, Nokia Siemens Networks, NTT DoCoMo, Samsung

CATT, Elektrobit, Ericsson, Fujitsu, ITRI, LGE, Mitsubishi, Nokia, Nokia Siemens Networks, NTT DoCoMo, Samsung

NTT DoCoMo, Inc.

Mr. Benoist Sébire

Mr. Benoist Sébire

CATT, Elektrobit, Ericsson, Fujitsu, ITRI, LGE, Mitsubishi, Nokia, Nokia Siemens Networks, NTT DoCoMo, Samsung

Mr. Benoist Sébire

R2-071745Text Proposal for UL SchedulingThe document was presented by Benoist Sebire from Nokia.Discussion:Text on retransmission to be rephrased.Some 'ffs' will be removed.Decision: The proposal was agreed in R2-072324.

4.8 Time alignment principles

R2-072014 Uplink synchronisation maintenance The document was presented by Umesh Anil (...) from NTTDoCoMo. **Discussion: Decision:** noted

Draft1 minutes of the 58th TSG-RAN WG2 meeting		
R2-071903 Maintenance of UL sync The document was presented by GJ () from Samsung. Discussion: Decision: noted	Samsung	Mr. Gert-Jan van Lieshout
R2-071630 Principles of uplink timing maintenance The document was presented by Jinsock () from NEC. Discussion: Decision: Nw can send a specific Timer to each UE. It may be set to an infinite value.	NEC	Mr. David Lecompte
R2-071996 Uplink Synchronization Maintenance The document was presented by XX () from Motorola. Discussion: Decision: noted	Motorola	
R2-071940 Uplink timing alignment The document was presented by <u>Mr. SungJun ParkXX ()</u> from LG_Electronics Inc. Discussion: Decision: noted	LG Electronics Inc.	
 R2-071741 UL synchronization recovery The document was presented by XX () from Nokia. Discussion: using 6 RBs for one UE is not resource efficient Decision: a dedicated signature on PRACH can be allocated to re-sync a UE on data arrival. of dedicated signatures is also possible. 	Nokia, Nokia Siemens Networks Usage of contention based PRACH	Mr. Benoist Sébire I as a fall back in case of lack
R2-071754 consideration on scenarios for TA update The document was presented by XX () from ZTE. Discussion:	ZTE	Mr. Zhongda Du

Decision: noted. The possibility to disable the Timer has been agreed when treating R2-071630

R2-071786 maintenance of UL synchronization The document was presented by Johan (...) from Huaweï. **Discussion: Decision:** noted.

When does the UE reset the timer? It will be decided after the response from RAN WG1 is received.

Decision: TA updates are sent in MAC PDUs using C-RNTI, inbedded with data or standalone. Possibility in some cases to use L1/L2 is FFS. Specific case of PRACH sent on arrival of DL data has to be studied.

4.9 MIMO principles

No input.

l

4.9 UE Capabilities

R2-071806 UE capability handling in LTE	806 UE capability handling in LTE QUALCOMM Europe			
The document was presented by Masato Kitazoe from QualcommJohan () from	Huaweï .			
Discussion:				
Decision: an e-mail discussion will be held on the independance or coupling of U	L and DL bit rate capability. In R	2-072337.		
P2 071810 Signaling Mathed for Unloading LIE Canability Information	Friesson	Mr. Janno Poisa		
The document was presented by XX () from Ericsson	LIICSSON	Will Jaillie Felsa		
Discussion:				
Decision: a proposal will be drafted based on the proposal and a LS will be sent to	SA2 & CT1.			
However, offline discussion could neither achieve an agreed proposal nor an agree	ement that NAS signalling should	be used to convey all UE capabilities.		
Operators wanted to assess how well the mobility drivers are fulfilled and how the	e S1 signalling load could be mini	mized. Email discussion was encouraged		
by several companies.				
R2-072080 UE capabilities	Motorola			
The document was presented by Ravi () from Motorola.				
Discussion:				
Decision: noted, Motorola will continue to work on the subject for the next meetin	ng, and interested companies can	contact Motorola.		
- 22	-			

huawei
4.10 LTE ACTIVE mobility procedures

4.11.1 Intra LTE

Data forwarding at handover

R2-071704 Data handling at handover The document was presented by XX (...) from Samsung. **Discussion:**

Decision: The following is agreed and is in fact captuted in the decision on 1719

- to keep the previous working assumption of selective forwarding/retransmission with UE PDCP reordering
- to FWD PDCP SDUs ٠
- to define a mechanism between the UE and the Nw allowing to only retransmit the PDCP SDUs which have not yet been delivered correctly on the radio mechanism
- Uplink re-ordering is done in the target eNB in PDCP layer.

End of decision

R2-071719 User Plane Data Handling at Handover The document was presented by Benoit Sebire (...) from Nokia. **Discussion:** Decision: agreed with one change in 10.1.2.3 add "with their sequence number" and another change

R2-071659 Consideration on the forwarding strategy in the inter-RAT HO scenario R2-072061 Consideration on the forwarding strategy in the inter-RAT HO scenario The document was briefly summarised by Sudeep Palat (...) from Alcatel-Lucent.

R2-072309 User Plane Data Handling at Handover The document was presented by Benoit Sebire (...) from Nokia. **Discussion:**

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Mr. Benoist Sébire

samsung

Networks

Alcatel-Lucent

Networks

Alcatel-Lucent, LG Electronics

Nokia, Nokia Siemens

Nokia, Nokia Siemens Mr. Benoist Sébire

Decision: agreed. A LS will be written in R2-072316 by NEC to SA2 & RAN3 informing them of our decision with the document attached.

R2-071655 The docume	Discussion on Data forwarding options for intra-LTE Handover nt was revised before presentation in R2-072060:	Alcat	tel-Lucent
R2-072060 R2-071774 R2-071822 R2-071973 R2-072063 Noted witho	Discussion on Data forwarding options for intra-LTE Handover Packet data handling at mobility User plane handling at mobility User Plane handling during inter–eNB HO Proposals on data handling at inter-eNB handover ut presentation	Alcat Panasonic Ericsson NEC NTT DoCoMo, Inc.	iel-Lucent, LG Electronics Mr. Janne Peisa Mr. Jagdeep Singh
ROHC at h	andover		
R2-071977 The docume Discussion: Decision: no	ROHC reset during inter-eNB handover nt was presented by Mathieu Boué-Lahorgue () from Nortel. ted	Nortel	
R2-072045 The docume Discussion: Decision: No	Support of ROHC and context relocation nt was presented by XX () from NEC. Several companies raised the fact that ROHC is a "black box" and therefore a oted. No agreement to support the ROHC context transfer or not. Contribution	NEC a context cannot be defined. as are invited at the next mee	Mr. David Lecompte
Other			
R2-071908 R2-071728 R2-071766 R2-071992	NAS message handling during mobility Measurement Gap Creation Text proposal on measurement gap scheduling High Level Comparison of Handover in GSM, UMTS and LTE	Samsung Nokia, Nokia Siemens Ne QUALCOMM Europe QUALCOMM Europe	Mr. Gert-Jan van Lieshout Mr. Benoist Sébire Dr. Nathan Tenny

R2-071992 High Level Comparison of Handover in GSM, UMTS and LTE

R2-071993 LTE Intra/Inter-RAT handover algorithms for LTE_ACTIVE state R2-072008 Load balancing solutions for LTE

R2-072009 Measurement gap control principles

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QUALCOMM Europe

NTT DoCoMo

NTT DoCoMo, T-Mobile, Orange, LG Electronics

Draft1 minutes of the $58^{\rm th}\, {\rm TSG}{\rm -RAN}\, {\rm WG2}$ meeting

R2-072012	E-UTRAN Measurement Gap Control for Inter-Frequency and Inter-RAT Handover	Motorola	
R2-071727	E-UTRA Measurement and Cell Reselection considerations	Nokia, Nokia Siemens Netwo	orks Mr. Benoist Sébire
R2-071759	Neighbour Cell List Considerations	Nokia, Nokia Siemens Netwo	orks Mr. Benoist Sébire
R2-071622	Minimizing the timing advance procedure requirement during LTE handover	InterDigital	Mr. Stephen Terry
R2-071629	Connection re-establishment	NEC	Mr. David Lecompte
R2-071631	Need for Maintained DRX at intra LTE handover	NEC	Mr. David Lecompte
R2-071633	Reliability Considerations for the Handover Command	Alcatel-Lucent	Mr. Osman Avdin
R2-071635	RLC status reporting during handover	Alcatel-Lucent	Mr. Osman Avdin
R2-071637	Relevant Information for Handover	Alcatel-Lucent	Mr. Osman Avdin
R2-071656	Discussion on target cell synchronisation during intra-LTE HO	Alcatel-Lucent	
R2-071657	Discussion on Handover Confirm message	Alcatel-Lucent	
R2-071684	A Pre-synchronization method for E-UTRA Handovers	Texas Instruments Inc	
R2-071687	Latency and overhead comparison for pre-synchronization in E-UTRA Handovers	Texas Instruments Inc	
	···· ; · · · · · · · · · · · · · · · · · · ·	Nokia, Nokia Siemens	
R2-071715	Minimising Radio Resource Wastage on Handover	Networks	Mr. Benoist Sébire
		Ericsson, NEC, Nokia,	
R2-071716	Radio Link Failure and Context Recovery	Nokia Siemens Networks	Mr. Benoist Sébire
		Nokia, Nokia Siemens	
R2-0/1/1/	Handover Failure Recovery	Networks	Mr. Benoist Sébire
D0 074740	Delevent lefermetien for Lleveleven	Nokia, Nokia Siemens	Ma Damaint Othing
R2-0/1/10		Networks Nekia Nekia Siemens	IVIT. Benoist Sebire
R2-071720	Forwarding Instant	Networks Samsung	Mr. Benoist Séhire
112 07 1720	r of warding instant	Nokia Nokia Siemens	
R2-071721	Sequence Number Handling at Handover	Networks	Mr. Benoist Sébire
		Nokia, Nokia Siemens	
R2-071722	Handover Command Transmission	Networks	Mr. Benoist Sébire
R2-071751	non-synchronized handover procedure	ZTE	Mr. Zhongda Du
R2-071752	consideration on handover interruption time	ZTE	Mr. Zhongda Du
R2-071773	Measurement Functionality split for Broadcast and Dedicated	Panasonic	
R2-071800	Protocol termination for HO signalling	QUALCOMM Europe	
R2-071801	Considerations on RRC re-establishment	QUALCOMM Europe	
R2-071820	On the details of the dedicated preamble at intra-LTE handover	Ericsson	Mr. Janne Peisa
R2-071821	Mobility during attach	Ericsson	Mr. Janne Peisa
R2-071823	E-UTRA Measurement Configuration and Control	Ericsson	Mr. Janne Peisa
R2-071824	Radio link failure at handover	Ericsson	Mr. Janne Peisa
		Nokia, Nokia Siemens	
R2-071864	Synchronised Handover	Networks	Mr. Benoist Sébire
			Mr. Himke van der
R2-071917	Recap of handover procedure, control plane aspects (with TP)	Samsung	Velde
R2-071918	Evaluation of backward handover schemes	Samsung	Mr. Himke van der

R2-071931	Contention-free Intra-LTE handover in synchronous network	IPWireless	
R2-071941	Periodic measurement reporting with semi-persistent scheduling	LG Electronics Inc.	
R2-071946	Early UL Synchronization Scheme for inter-eNodeB Handover	ITRI	
R2-071956	DRX Operation During Handover	RIM	Mr. Gordon Young
R2-071974	Resource allocations in target cell after Handover	NEC	Mr. Jagdeep Singh
R2-071975	Text Proposal for Intra-LTE Handover	NEC	Mr. Jagdeep Singh
R2-071978	Inter eNB handover in a synchronous network	Nortel	
R2-071979	Forward Hand-Off Need, Simulations results	Nortel	
R2-071980	Forward Hand-Off options	Nortel	
R2-071982	Admission Control at Target eNB	Nortel	
R2-072003	Handover Interruption Times and Duration	Motorola	
R2-072004	RACH Preamble Reservation for Handover	Motorola	
R2-072036	UL time synchronized handover	Samsung	
R2-072037	Gap control in E-UTRAN	Samsung Electronics	
R2-072038	Measurement Gap and DRX interaction	Samsung Electronics	
R2-072081	Radio Link Failure	Motorola	
R2-072085	Handover procedure for a low activity UE	LG Electronics Inc.	
R2-072136	On the need of fast and robust handover failure recovery		Verizon Wireless, Nortel Networks
Not treated			

4.11.2 LTE to/from UTRAN

4.12 LTE MBMS

R2-071733	MBMS Agreements
The documer	nt was revised in R2-072274

R2-072274 MBMS Agreements The document was presented by XX (...) Nokia. **Discussion: Decision:** revised in R2-072314

R2-072314 MBMS Agreements The document was presented by XX (...) Nokia. Nokia, Nokia Siemens Networks, Samsung

Mr. Benoist Sébire

Velde

Nokia, Nokia Siemens Networks, Samsung

Mr. Benoist Sébire

Nokia, Nokia Siemens Networks, Samsung

Mr. Benoist Sébire

Draft1 minutes of the 58th TSG-RAN WG2 meeting Discussion: Decision: revised after discussion in R2-072317

Nokia, Nokia Siemens R2-072317 MBMS Agreements Networks, Samsung Mr. Benoist Sébire Discussion: Decision:agreed R2-071734 MCCH Control Nokia, Nokia Siemens Networks Mr. Benoist Sébire R2-071776 MCCH Transmission in LTE Panasonic R2-071981 Hierarchical MCCH Nortel R2-071963 MCCH Design RIM Mr. Gordon Young Transmission of MCCH R2-071829 Ericsson Mr. Janne Peisa Mapping of MBMS logical channels to DL-SCH Mr. Janne Peisa R2-071825 Ericsson Multiple packet loss recovery and RLC PDU format in eMBMS Alcatel-Lucent R2-071649 R2-071650 E-MBMS transmission mode selection and switching Alcatel-Lucent Service scheduling for E-MBMS combining R2-071651 Alcatel-Lucent R2-071652 Support of scalable codec for E-MBMS Alcatel-Lucent Transmission of E-MBMS control information R2-071653 Alcatel-Lucent R2-071700 LTE MBMS User Detection Scheme Freescale Semiconductor Inc Inter-layer notification Nokia, Nokia Siemens Networks Mr. Benoist Sébire R2-071735 R2-071736 Open issues in requirements from multi-cell content synchronization solutions Nokia, Nokia Siemens Networks Mr. Benoist Sébire R2-071765 E-MBMS scheduling QUALCOMM Europe Dr. Nathan Tenny R2-071777 Uplink feedback for eMBMS SFN operations Panasonic MBMS Network Optimization R2-071788 huawei R2-071826 Multiplexing of MBMS services Ericsson, Samsung Mr. Janne Peisa LTE MBMS functionality R2-071827 Ericsson Mr. Janne Peisa DL-SCH supporting single cell PTM with HARQ/CQI R2-071828 Ericsson Mr. Janne Peisa R2-071872 MBMS notification in E-UTRAN CATT Mrs. Haiyang Quan R2-071873 MBMS control signalling in E-UTRAN CATT Mrs. Haiyang Quan R2-071880 Active Recovery of MBMS Data LG Electronics Inc. R2-071889 MBMS User authentication LG Electronics Inc. R2-071910 Counting in E-MBMS **IPWireless** R2-071919 LTE MBMS Notifications I G Electronics Inc R2-071922 LTE MBMS Transmission LG Electronics Inc. R2-071962 Polling Performance for LTE MBMS RIM Mr. Gordon Young R2-071964 Multi-Stage Setup for LTE MBMS Transmissions RIM Mr. Gordon Young R2-071966 The further discussion on eMBMS scenarios of deployment China Mobile

R2-071967	Use of eMBMS uplink feedback	China Mobile
R2-071983	Discussion of eMBMS Uplink Feedback Schemes	NEC
R2-071988	CQI reporting in E-MBMS single cell transmission	Alcatel-Lucent
R2-071998	Considerations on MBMS Resource Allocation	Motorola
R2-071999	Multicell EMBMS CQI Feedback	Motorola
R2-072000	Further Results on EMBMS Transmission Configurations	Motorola
R2-072005	Considerations on uplink feedback channel for E-MBMS	ETRI
	Additional results on over-provisioning required to accommodate overlapping	
R2-072007	SFN areas	Motorola
R2-072025	Uplink Feedback for E-MBMS	Motorola
R2-072082	Random Access for LTE MBMS	LG Electronics Inc.
R2-072083	Random Access for LTE MBMS	LG Electronics Inc.
R2-072141	ROHC for E-MBMS	
Not presente	d due to lack of time	

Other LTE Stage 2 subjects 4.13

R2-072011 Rationale for standardising eNB measurements R2-072078 RRM framework in the LTE architecture The document were for information only

UE Support for self-configuration and self-optimisation - Proposal for Stage2 (only RAN2 relevant part) R2-071947 The document was presented by Axel Klatt (...) from T-Mobile.

Discussion:

Decision: agreed except the bullet mentioning periodic and event triggers.

R2-071948 Generic 'subscriber type' indication via S1 interface The document was presented by Axel (...) from T-Mobile.

Discussion: The meaning/scope of the subscriber type should be specified more precisely, although the handling in the eNB is RRM and operator specific. Some operator specific values may also be defined. Important analogy to what is done for QoS Label.

Motorola

Mr. Jagdeep Singh Mr. Stanislas Bourdeaut

NTT DoCoMo, Orange, Telecom Italia, Telefonica, T-Mobile, Vodafone Vodafone Group, Telecom Italia, Orange, KPN

T-Mobile, NTT DoCoMo, KPN, China Mobile, Orange, Vodafone, Sprint, Telecom Italia, Telefónica, Huawei, Infineon, Nokia, Nokia-Siemens Networks, Mr. Axel Klatt Samsung

T-Mobile, Vodafone, Orange, Telecom Italia, Telefónica

Mr. Axel Klatt

Draft1 minutes of the 58th TSG-RAN WG2 meeting Decision: noted.

R2-071617	On setting the C-RNTI in RACH message two	Nokia Siemens Networks	
R2-071624	Byte alignment for RLC and MAC headers?	InterDigital	Mr. Stephen Terry
R2-071625	MAC and RLC delivery notification	InterDigital	Mr. Stephen Terry
R2-071627	Automatic paging power control	NEC	Mr. David Lecompte
R2-071628	VoIP Optimized DRX control	NEC	Mr. David Lecompte
R2-071658	Discussion on RAN implications of Equivalent Tracking areas	Alcatel-Lucent	
R2-071660	RLC PDU header structure in case of re-use of PDPC SN for RLC SN	Alcatel-Lucent	
R2-071661	Interaction of DRX and downlink HARQ in LTE	Alcatel-Lucent	
	Consideration on the polling request for the isolated or last data transmission in		
R2-071662	LTE	Alcatel-Lucent	
R2-071675	UE assisted tracking area update	LG Electronics Inc.	Mr. Patrick Fischer
R2-071677	Optimization of RB establishment	LG Electronics Inc.	Mr. Patrick Fischer
		Nokia, Nokia Siemens	
R2-071723	Requirements for Redirection	Networks	Mr. Benoist Sébire
		Nokia, Nokia Siemens	
R2-071724	High Level Mobility Principles in a Heterogeneous Network	Networks	Mr. Benoist Sébire
		Nokia, Nokia Siemens	
R2-0/1/25	Access Pipes Use Cases	Networks	Mr. Benoist Sébire
D2 071720	HARO ARO interactions	NEC, NOKIA, NOKIA	Mr. Bonoiot Cóhiro
R2-0/1/29	HARQ-ARQ III.eraciions	Nokia Nokia Siomons	wir. Denoist Sebire
R2-071730	MAC Header Structure	Networks	Mr. Renoist Séhire
112 07 1700		Nokia Nokia Siemens	WIT. Denoist Ocbire
R2-071731	RLC Header Structure	Networks	Mr. Benoist Sébire
		Nokia, Nokia Siemens	
R2-071740	Control of UE measurements for Network Configuration	Networks	Mr. Benoist Sébire
		Nokia, Nokia Siemens	
R2-071743	Further considerations on DL semi-persistent scheduling	Networks	Mr. Benoist Sébire
R2-071753	DRX mode transit model	ZTE	Mr. Zhongda Du
R2-071778	PDCP SN reuse in RLC PDU for LTE	Panasonic	
R2-071779	UL HARQ Protocol issues	Panasonic	
R2-071780	RLC TM mode for U-Plane	Panasonic	
R2-071781	MAC PDU format for LTE	Panasonic	
R2-071782	Security Context Information and Security Functionality for LTE	Panasonic	
R2-071783	DRX handling issues in LTE	Panasonic	
R2-071789	LTE RLC functions and services	huawei	
R2-071796	On the issue of HARQ/ARQ interaction	LG Electronics Inc.	
	00		
	29		

R2-071803	Considerations on SRB establishment
R2-071804	Camping load balancing in LTE
R2-071805	Optimization for Tracking Area Update signalling
R2-071830	A Semi-Autonomous DRX Control Scheme for LTE_ACTIVE
R2-071831	On Intra-LTE Cell Reselection Methods
R2-071832	Radio Resource Management Aspects of Inter-RAT Handovers
R2-071833	On Inter-RAT Cell Reselection Principles
R2-071834	PDCP PDU header formats in LTE
R2-071835	Support for ROHC in SAE/LTE
R2-071836	Configuration of PDCP in SAE/LTE
R2-071837	L2 Sequence Number in LTE
R2-071838	HARQ Configuration for LTE
R2-071839	Byte alignment for user plane protocols in LTE
R2-071841	Resource fragmentation in LTE uplink
R2-071842	Clean up of Stage 2 FFS
R2-071843	NDI-less HARQ operation
R2-071844	HARQ-ARQ Interactions for NACK to ACK error
R2-071846	Number of logical channels in RB
R2-071847	CQI Reporting with regards to DRX operation
R2-071848	Discussion on Uplink Traffic Shaping
R2-071849	PDCP Sequence Number and ROHCv2
R2-071871	Downlink HARQ Error Detection in LTE
R2-071878	Discussion on short transaction time
R2-071886	Discussion on MAC PDU structure
R2-071887	Scheduling consideration on L2 Headers
R2-071901	CQI handling during DRX
R2-071904	Idle mode paging
R2-071905	Optimization of downlink persistent scheduling
R2-071909	UL control transmissions during DRX
R2-071913	RLC PDU format for LTE
R2-071914	Radio connection establishment
R2-071915	Use of tracking area- and cell identity for private networks/home cells
R2-071916	Neighbouring cell information
R2-071925	Label characteristics and PBR for non-GBR
R2-071926	Transmission of LTE Paging
	- 5 - 5

QUALCOMM Europe QUALCOMM Europe QUALCOMM Europe Ericsson LG Electronics Inc. Ericsson LG Electronics Inc. LG Electronics Inc. CATT LG Electronics Inc. LG Electronics Inc. LG Electronics Inc.

Samsung

Samsung ETRI

Samsung, NTT DoCoMo Panasonic

Samsung

Samsung

Samsung IPWireless LG Electronics Inc. Mr. Janne Peisa Mr. Janne Peisa

Mr. Janne Peisa

Mrs. Haiyang Quan

Mr. Gert-Jan van Lieshout Mr. Gert-Jan van Lieshout

Mr. Gert-Jan van Lieshout

Mr. Himke van der Velde Mr. Himke van der Velde Mr. Himke van der Velde

R2-071927	Paging group indication	IPWireless	
		Samsung, LG Eletcronics	Mr. Himke van der
R2-071932	Registration on home & private eNBs	Inc.	Velde
R2-071942	ACK to NACK error detecting mechanism	LG Electronics Inc.	
R2-071943	Discussion on need-based adaptive HARQ in E-UTRAN UL	LG Electronics Inc.	
R2-071944	Transition indicator for VoIP in UL	LG Electronics Inc.	
R2-071952	The Urgency of HARQ-ARQ Interactions	ITRI	
R2-071953	A New Measurement to Support UL Scheduler Operation	Mitsubishi Electric Corp.	
R2-071959	Adaptive Modulation and Coding for LTE VoIP	RIM	Mr. Gordon Young
R2-071969	Paging Procedure in LTE	NTT DoCoMo, Inc., NEC	Ū
R2-071976	Clarification on use of Prioritized Bit Rate (PBR)	NEC	Mr. Jagdeep Singh
R2-071984	HARQ/ARQ Interactions	Philips	Mr. Paul Bucknell
R2-071989	Idle Gaps for Handover Measurements in E-UTRAN	Ericsson	Mr. Janne Peisa
R2-071990	DRX procedure for VoIP	QUALCOMM Europe	
R2-072006	RLC header design	Motorola	
R2-072013	MAC header for control message in LTE	ASUSTeK	
R2-072015	MAC PDU structure for LTE	NTT DoCoMo. Inc.	
			Mr. Etienne
R2-072019	Cryptosync in LTE	Qualcomm Europe	Chaponnière
			Mr. Etienne
R2-072024	PDCP reordering	Qualcomm Europe	Chaponnière
R2-072034	First quantification of UL control	Samsung	
R2-072040	PDCP SN and RLC SN	NTT DoCoMo, Inc.	
R2-072043	Location of DL PDCP Reordering in LTE during Handover	Fujitsu	
R2-072044	Use of Global Cell ID	Ericsson	Mr. Janne Peisa
R2-072046	UE specific Intra-LTE (interfrequency) and inter-RAT cell reselection	NEC	
R2-072055	RLC header format	Fujitsu	
R2-072064	RLC PDUs for LTE	NTT DoCoMo, Inc.	
R2-072075	SAE Bearer and SAE Radio Bearer Independence	Vodafone Group	
R2-072076	Network Specific Mandatory Default	Vodafone Group	
R2-072077	Initial Standardisation Requirements from Self-Organizing Networks	Vodafone Group, T-Mobile	
R2-072087	Considerations on ROHC feedback for L2 design	LG Electronics Inc.	
R2-072070	Discussion of Access Control Requirements for Home-eNodeB	Vodafone Group	
R2-072071	Discussion of Mobility Requirements for Home-eNodeB	Vodafone Group	
R2-071665	Discussion on Security mode control for LTE	Alcatel-Lucent	
	,		Mr. Etienne
R2-072023	Number of HARQ processes	Qualcomm Europe	Chaponnière
R2-071971	Discussion on Uplink Scheduling Request	TD Tech Ltd.	
Not treated			

4.14 Stage 3: rapporteur inputs (based on the stage 2 status)

R2-071972	36.306 E-UTRA UE Radio Access Capabilities	Motorola (Rapporteur)	Mr. Richard Burbidge

4.14.1 MAC

R2-071705 Byte alignment for L2 headers Not handled.

R2-071707 PDCP/RLC/MAC header format Not treated R2-071997 MAC specification - Editors Clarification

Access service classes is to be removed

Sub clause 5.5 is new capturing the Stage 2 but with new text.

Random Access procedure is defined to be only one generic procedure. Contention or non contention is seen in the procedure itself.

Sub Clause 4.4 Should we differentiate the uplink and downlink. Nokia: Separate into UL and DL functions. LG: section should show UE and eNB as well. Decision: Only UE side functions will be specified and we differentiate UL and DL functions plus which channels are affected by different functions a table would be nice. The editors will try to comply with this.

LG Electronics Inc., Nokia, NOKIA SIEMENS

Ericsson, QUALCOMM Europe

Samsung

NETWORKS, Samsung, Texas Instruments Inc

Mr. Janne Peisa

Definition of common channel are those mobiles with and RRC connection. Panasonic, Samsung: Definition is needed for a channel not using a dedicated RNTI. Motorola: How does this definition help us? Decision the columns are removed. NTT DoCoMo: We should state which RNTIs we use for each channel.

Decisions In Sub clause 4.5.3.2 MCCH is to be mapped on DL-SCH

LG: Remove Traffic volume measurement; SS terminology is confusing.

Decision: Renamed to Buffer state reporting.

Decision: Section 4.3.1 Services Measurement reporting is to be FFS. Decision: Section 5.1 RACH is to be controlled in MAC RRC Stage 3 is to reflect this. Note: For other procedures (other than RACH) the modelling between RRC and MAC shall be clearer Decision: The RACH procedure shall be specified FDD/TTD independent.

The difference between Stage 2 and Stage 3 is because it is modelled differently.

Discussion on the use of numbering or bulleting should be FFS.

Decision section 5 onwards are empty sections and the rapporteurs give editor notes describing the content of the section.

Moto: suggests to have a structure on how to configure MAC, reconfigure MAC and MAC procedures. Also would like that the sections to be grouped so that the flow makes sense.

Sub clause 5.3.3. RB prioritization = TFC selection

NTT DoCoMo: Where is the section on DRX periods? Rapporteurs DRX is to be described in the procedures.

See general summary and way forward

 R2-072272
 TP for LC Prioritisation
 Qualcomm, Ericsson

 R2-072273
 Outline of MAC specification
 Qualcomm, Ericsson

 4.14.2
 RRC

 R2-071921
 RRC skeleton
 Rapporteur (Samsung)

 Mr. Himke van der Velde

Agree on way forward on the next meeting

Agree on 1921. Comments to be given offline to Himke

TMO: Is it decided not to have cell change order, Decision: Subclause 4.2 Cell change order is add and made FFS Rapporteur: Sub clause 4.4 Random access is to be done in the MAC so we can remove FFS.

See general summary and way forward

Proposal:

R2-071924	Text proposal for RRC chapter: General	Samsung	Mr. Himke van der Velde

Mr. Himke van der Velde R2-072066 Text proposal for RRC chapters: Procedures and Protocol data units Samsung Not presented see 2207 R2-072207 Text proposal for RRC chapters: Procedures and Protocol data units Mr. Himke van der Velde Samsung 2207 update of 2066 Two Teleconference to review the text in the proposal. How to organise the messages ands the procedures; See general summary and wayforward R2-072222 Initial version of LTE RRC specification Samsung 4.14.3 PDCP R2-071678 Open issues for PDCP specifications Mr. Patrick Fischer LG Electronics (rapporteur) R2-071679 Updated PDCP skeleton specification LG Electronics (rapporteur) Mr. Patrick Fischer

SS: It hasn't been decided where the SN is in PDCP PDU or SDU, SN is FFS for PDCP PDU/SDU to be added to text and diagram. Decision: Sub clause 4.5: Channel structure is removed. Decision: Sub clauses 5.1.2 & 5.1.3 are combined Decision sub clause 5.1.1. motivation needs to be explained

Ericsson: wanted to start stage 3: Rapporter: (Patrick) felt that there were too many open points and would prefer to close open points before initiating detailed stage 3 work.

See general summary and wayforward

4.14.4 RLC

R2-071708Variable size RLC SNsamsungR2-071709Lite RLC versus normal RLCsamsungR2-072039E-UTRA RLC specification work outlineRapporteurMoto: Interaction with HARQ, how is it going to be done? General text of service provided by lower layers.VF: Avoid hanging paragraphs because it can't be referenced.(taken off line)

Nokia: Can we use the term Radio Bearer. Yes it is to be defined offline.

Nokia: there is a duplication of PDU structures in the document. Decision: remove PDU structures from these section to be included in other sections. LG: MAC should be replaced by lower layer Decision: Agreed

Decision: General section will describe how number of RLC PDU is decided needs to be added.

See general summary and wayforward

General summary of the way forward for stage 3 MAC/RLC/PDCP/RRC

Rapporteurs are to provide Base line stage 3 docs with general sections agreed by the end of the week agreed off line people are to discuss with the rapporteurs. These sections should be in line with the LTE Stage 2.

The outline sub clauses beyond the general sections are to have text explaining as to what detail is to be included in that section.

These will form the base line of the Stage 3.

After this meeting, each stage three specification will be progressed by teleconference and email. Rapporteurs are to provide either text proposals for discussion (MAC/RRC) or an Open issue list (RLC/PDCP) as input to these teleconference and email discussions.

Specific way forward

MAC way forward: Text sections from 1997 are to be extracted by the rapporteurs and used as input to 2 Teleconference and email discussions to be held before the Orlando meeting.

RRC way forward: RRC Stage 3 outline (1921) and general section (2206) are merged and to be taken as the agreed base line for RRC. Tdoc 2207 (update of 2066) is the input to be discussed on the Teleconference and email discussions. 2 Teleconferences are to be held before the next meeting in Orlando.

RLC way forward: RRC Stage 3 outline (in 2039) is to be modified with the minor comments and is to be agreed as a base line for RLC people to discuss with the rapporteur offline. 2039discussion document is to be used as input to the 2 teleconference and email discussions to be held between now and the Orlando meeting..

PDCP way forward: 1679 is to be updated in line with comments and to be agreed off line, Delegates to discuss with the rapporteur Stage 3 baseline to be agreed by the end of this week. The Open issue document (1678) is to form the discussion for the teleconference and email discussion. The result of this will be reported to the Orlando meeting.

R2-072312 EUTRA RLC Specification

4.14.5 Cell selection & re-selection

R2-071713 Skeleton of UE IDLE mode procedures

Nokia (Rapporteur)

Mr. Benoist Sébire

NTT DoCoMo, Inc.

Chapter 5 process and procedures? Keep as in 25.304 E///: States and state transitions are not procedures. TMO: We will have the same states so keep structure as it is and update 25.304. Reuse UMTS spec QC: What is covered in Tracking area registration? Interaction between AS and NAS as in UTRAN. Wait until discussion of 1951 R2-071714 UE IDLE mode procedures Mr. Benoist Sébire Nokia, Nokia Siemens Networks Not treated. T-Mobile, NTT DoCoMo, Vodafone, R2-071949 Support of procedures/features related to intra-frequency mobility Orange, Telecom Italia Mr. Axel Klatt Use the table in this document as the basis of Stage 3. SS: Is cell barring with intra freq indic used ? Yes. Which case is this used? TMO: Indoor out door SS: We later on we discovered the UE should be on the best cell. So this is in contradiction. TI: Principle the mobile should not be allowed to camp on the same frer. In some case the cell doesn't have problems in UL for example operator testing so UL interference is acceptable. NTT Confirm this UE should select second best cell on same freq used for, normal barring or operator use. Decision: Way forward create Annex and add the Features and procedures table part this is used to guide the Stage 3 input. Text proposals and discussions are invited. Support of procedures/features related to inter-frequency/inter-T-Mobile, NTT DoCoMo, Vodafone, R2-071950 RAT mobility Orange, Telecom Italia Mr. Axel Klatt Requirements are similar to 1949. Decision: Put in to skeleton an Annex the Features and procedures table part... T-Mobile, Telecom Italia, Vodafone, Stage3 text proposal on idle mode procedures in E-UTRAN R2-071951 China Mobile Mr. Axel Klatt Green marked text indicates the areas commented on reflector. Ericsson: Definitions need to be change and picture 4.1 needs to be changed. Nok: These comments are naming and editorial corrections. TMO: There shouldn't be too much change in the existing text. The changes to the text reflect the agreed changes in the Stage 2.

Nokia Rapporteur: One agreement in Stage 2 is missing Transition from to ACTIVE to IDLE camp on the cell indicated by the network. Document is to be updated.

1951 is accepted with the addition of an annex with tables of requirements as decided from 1949 & 1950.

Email discussion is to be held between now and Orlando meeting. Text proposals and discussion documents are invited.

R2-072311 UE procedures in idle mode for LTE: Text proposal

4.14.6 Model of the physical layer

No inputs.

<end>

4.4 Performance verification

Ericsson, Motorola, Nokia, Nokia R2-071810 LTE Performance verification - U-plane and C-plane latencies Siemens Networks, Samsung, NEC The document was presented by Magnus from Ericsson. **Discussion:** Decision: The document was noted. The TR will be updated with this proposal. A CR will be presented to the plenary (source: RAN2). See R2-072146. R2-071869 LTE C-plane + U-plane latency analysis for TDD frame structure type 2 CATT The document was presented by Haiyang Quan from Datang. **Discussion:** All in 1ms frame durations would make the solution simpler. Decision: The document was noted. All (FDD and all TDDs) will be in 1ms frame duration. Re-doing of calculations and merge is necessary. R2-071920 LTE Performance verification for TDD - U-plane and C-plane latencies **IPWireless** The document was presented by (...) from IPWireless. **Discussion:** Decision: The document was noted. R2-071810, R2-071869, R2-071920 will be merged in on CR on 25.912. In R2-072146. CR number 0003 (Ericsson): R2-072146 LTE U-plane and C-plane latencies CR 0003 Ericsson Ericsson, Nokia, Nokia Siemens Networks, Samsung, R2-071811 LTE Performance verification – Handover latency NEC Mr. Janne Peisa The document was presented by Magnus (...) from Ericsson.

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Nokia, Nokia Siemens Networks

Discussion:

SFN neighbour cell knowledge is needed for the neighbour cell detection. This is based on FDD only so far.

Decision: The document was noted. A CR on 25.912 will be produced (Ericsson).

4.5 System Information content & delivery

R2-071702	SFN Synchronization without BCH bits for LTE – Latency Reduction Options	SHARP corporation	
R2-071738	Procedure for Reading Scheduling Units	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire
R2-071739	System Information Change Indication	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire
R2-071762	Scheduling of D-BCH	QUALCOMM Europe	Dr. Nathan Tenny
R2-071763	Structure of BCH	QUALCOMM Europe	Dr. Nathan Tenny
R2-071768	System information contents and the periodicity for No NCL	Panasonic	
R2-071769	System information reception for Inter-frequency mobility	Panasonic	
R2-071770	Cell reselection before call setup procedure	Panasonic	
R2-071785	Neighbour cell reduction using LCV	huawei	
R2-071813	Scheduling of System Information	Ericsson	Mr. Janne Peisa
R2-071814	The content and timing of BCH	Ericsson	Mr. Janne Peisa
R2-071815	Transmission of BCH	Ericsson	Mr. Janne Peisa
R2-071870	Notification scheme for system information Change	CATT	Mrs. Haiyang Quan
			Mr. Himke van der
R2-071911	System information structure (with TP)	Samsung	Velde
50.074040			Mr. Himke van der
R2-071912	System information scheduling and change notification	Samsung	Velde
R2-071968	P-BCH Transmission Interval in LTE	NTT DoCoMo, Inc., NEC	
R2-072010	Operator's view on neighbour cell information	NTT DoCoMo, Vodafone, Telecom	Italia, T-Mobile, Orange
R2-071759	Neighbour Cell List Considerations	Nokia, Nokia Siemens Networks	

R2-071759 Neighbour Cell List Considerations (Agenda item 4.11 also).

R2-071911 System information structure (with TP) The document was revised before presentation in R2-072205:

R2-072205 System information structure (with TP)

The document was presented by Himke van der Velde from Samsung. **Discussion:**

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Samsung

Mr. Himke van der

Velde

Samsung

Draft1 minutes of the 58th TSG-RAN WG2 meeting Scheduling info was removed from the BCH. One sentence will be deleted. Last picture contains one specific scheduling scheme. Decision: The text proposal was agreed in R2-072325.

4.6 Random access procedure

R2-071626	RACH retransmission number	NEC	Mr. David Lecon
R2-07166 4	Discussion on contents of message 3	Alcatel-Lucent, Samsung	
R2-071673	Transport format and power headroom in preamble Retransmission	LG Electonics Inc.	Mr. Patrick Fisch
R2-07167 4	Use of short C-RNTIs in message 2	LG Electronics Inc.	Mr. Patrick Fisch
R2-071681	Urgent Non-urgent split of RACH signatures in E-UTRA	Texas Instruments Inc	
R2-071726	Non-contention based Handover	Nokia, Nokia Siemens Networks	Mr. Benoist Sébi
R2-071732	Differential RACH Access based on Access Classes	Nokia, Nokia Siemens Networks	Mr. Benoist Sébi
R2-071771	Remaining issues on Random Access procedure usage	Panasonic	
R2-071817	Solution for sending NAS together with RRC connection request	Ericsson	Mr. Janne Peisa
			Mr. Gert-Jan var
R2-071906	Access Service Classes in LTE	Samsung	Lieshout
R2-071923	Discussion on Message 4 in Random Access	LG Electronics Inc.	
R2-071938	Clarification on RA procedure	LG Electronics Inc.	
R2-071939	Optimization for message 2 transmission	LG Electronics Inc.	
R2-071970	Contention Resolution and Initial Random Access	TD Tech Ltd.	
R2-071991	Content of Message 2	QUALCOMM Europe	
R2-072033	Message 2 transmission when a dedicated preamble used	Samsung	
R2-072035	Optimization of contentio resolution in aRACH	Samsung	
R2-072050	Consideration related to Random Access Response	ASUSTeK	
R2-07208 4	Management of Dedicated Signatures	LG Electronics Inc., Samsung	
R2-072088	UE Identity Validity in RA Procedure	ASUSTeK	
R2-072089	Issues on Random Access Procedure	ASUSTeK	
R2-072090	Random and dedicated preamble based RACH access in E-UTRAN	IPWireless	
R2-072096	Consideration related to Contention Resolution	ASUSTeK	

R2-072048 Issues related to RACH access preamble The document was revised before presentation in R2-072153:

R2-072153 Issues related to RACH access preamble

ASUSTeK

ASUSTeK

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4.7 UL scheduling optimisations for VoIP (RAN1 reply LS needed)

R2-071742	UL VolP Capacity for Semi-persistent Scheduling and Group Scheduling	Nokia, Nokia Siemens N
R2-071744	Synchronous adaptive HARQ for E-UTRAN UL	Nokia, Nokia Siemens N
		CATT, Elektrobit, Ericss
		ITRI, LGE, Mitsubishi, N
		Siemens Networks, NTT
R2-071745	Text Proposal for UL Scheduling	Samsung
R2-071818	DRX control for LTE_ACTIVE and VolP	Ericsson
R2-071840	ROHC Compliant Scheduling	LG Electronics Inc.
R2-071961	Uplink VolP Scheduling with Fast Indication	RIM
R2-071971	Discussion on Uplink Scheduling Request	TD Tech Ltd.
R2-07199 4	Impact of HARQ Termination Statistics on UL VoIP Capacity	QUALCOMM Europe
R2-071995	On Uplink Scheduling for VolP	QUALCOMM Europe
R2-072062	The need for uplink enhancement	samsung
R2-072002	UL VolP Scheduling	Motorola

Time alignment principles 4.8

R2-071630	Principles of uplink timing maintenance
R2-071741	UL synchronization recovery
R2-07175 4	consideration on scenarios for TA update
R2-071786	maintenance of UL synchronization
R2-071903	Maintenance of UL sync
R2-071940	Uplink timing alignment
R2-071996	Uplink Synchronization Maintenance
R2-072014	Uplink synchronisation maintenance

4.9 MIMO principles

No input.

Vetworks Vetworks son, Fujitsu, Nokia, Nokia T DoCoMo,

NEC Nokia, Nokia Siemens Networks ZTE huawei

Samsung LG Electronics Inc. Motorola NTT DoCoMo, Inc.

Mr. Benoist Sébire Mr. Benoist Sébire

Mr. Benoist Sébire Mr. Janne Peisa

Mr. Gordon Young

Mr. David Lecompte Mr. Benoist Sébire Mr. Zhongda Du

Mr. Gert-Jan van Lieshout

4.10 UE Capabilities

R2-071806UE-capability handling in LTEQUALCOMM EuropeR2-071819Signaling Method for Uploading UE-Capability InformationEricssonMr. Janne PeisaR2-072080UE-capabilitiesMotorola

4.11 LTE_ACTIVE mobility procedures

R2-071704	Data handling at handover	samsung	
R2-071728	Measurement Gap Creation	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire
R2-071766	Text proposal on measurement gap scheduling	QUALCOMM Europe	Dr. Nathan Tenny
R2-071992	High Level Comparison of Handover in GSM, UMTS and LTE	QUALCOMM Europe	
R2-071993	LTE Intra/Inter-RAT handover algorithms for LTE_ACTIVE state	QUALCOMM Europe	
R2-072008	Load balancing solutions for LTE	NTT DoCoMo, T-Mobile, Orange, LO	G Electronics
R2-072009	Measurement gap control principles	NTT DoCoMo	
R2-072012	E-UTRAN Measurement Gap Control for Inter-Frequency and Inter-RAT Handover	Motorola	
R2-071727	E-UTRA Measurement and Cell Reselection considerations	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire
R2-071759	Neighbour Cell List Considerations	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire

4.11.1 Intra LTE

R2-071622	Minimizing the timing advance procedure requirement during LTE handover	InterDigital	Mr. Stephen Terry
R2-071629	Connection re-establishment	NEC	Mr. David Lecompte
R2-071631	Need for Maintained DRX at intra LTE handover	NEC	Mr. David Lecompte
R2-071633	Reliability Considerations for the Handover Command	Alcatel-Lucent	Mr. Osman Aydin
R2-071635	RLC status reporting during handover	Alcatel-Lucent	Mr. Osman Aydin
R2-071637	Relevant Information for Handover	Alcatel-Lucent	Mr. Osman Aydin
R2-071655	Discussion on Data forwarding options for intra-LTE Handover	Alcatel-Lucent	
R2-071656	Discussion on target cell synchronisation during intra-LTE HO	Alcatel-Lucent	
R2-071657	Discussion on Handover Confirm message	Alcatel-Lucent	
R2-071684	A Pre-synchronization method for E-UTRA Handovers	Texas Instruments Inc	
R2-071687	Latency and overhead comparison for pre-synchronization in E-UTRA Handovers	Texas Instruments Inc	
R2-071715	Minimising Radio Resource Wastage on Handover	Nokia, Nokia Siemens Networks Ericsson, NEC, Nokia,	Mr. Benoist Sébire
R2-071716	Radio Link Failure and Context Recovery	Nokia Siemens Networks Nokia, Nokia Siemens	Mr. Benoist Sébire
R2-071717	Handover Failure Recovery	Networks	Mr. Benoist Sébire

		Nokia Nokia Siomone	
R2-071718	Relevant Information for Handover	Networks	Mr. Renaist Séhira
112 07 17 10		Nokia Nokia Siemens	Will Denoist Ocbire
R2-071719	User Plane Data Handling at Handover	Networks	Mr. Benoist Sébire
	, , , , , , , , , , , , , , , , , , ,	Nokia, Nokia Siemens	
R2-071720	Forwarding Instant	Networks, Samsung	Mr. Benoist Sébire
		Nokia, Nokia Siemens	
R2-071721	Sequence Number Handling at Handover	Networks	Mr. Benoist Sébire
		Nokia, Nokia Siemens	
R2-071722	Handover Command Transmission	Networks	Mr. Benoist Sébire
R2-071751	non-synchronized handover procedure	ZTE	<u>Mr. Zhongda Du</u>
R2-071773	Measurement Functionality split for Broadcast and Dedicated	Panasonic	
R2-071774	Packet data handling at mobility	Panasonic	
R2-071800	Protocol termination for HO signalling	QUALCOMM Europe	
R2-071801	Considerations on RRC re-establishment	QUALCOMM Europe	
R2-071820	On the details of the dedicated preamble at intra-LTE handover	Ericsson	Mr. Janne Peisa
R2-071821	Mobility during attach	Ericsson	Mr. Janne Peisa
R2-071822	User plane handling at mobility	Ericsson	Mr. Janne Peisa
R2-071823	E-UTRA Measurement Configuration and Control	Ericsson	Mr. Janne Peisa
R2-071824	Radio link failure at handover	Ericsson	Mr. Janne Peisa
		Nokia, Nokia Siemens	
R2-07186 4	Synchronised Handover	Networks	Mr. Benoist Sébire
			Mr. Gert-Jan van
R2-071908	NAS message handling during mobility	Samsung	Lieshout
D0 074047	Description of the second s	0	Mr. Himke van der
R2-071917	Recap of handover procedure, control plane aspects (with TP)	Samsung	Velde Ma Llinska van dan
D2 071019	Evolution of bookward handover exhamon	Sameung	Voldo
P2 071031	Contantion from Intra LTE handover in synchronous notwork	DW/iroloss	veice
P2 071041	Boriedia measurement reporting with semi persistent scheduling		
R2-071046	Ferrouic measurement reporting with semi-persistent scheduling		
R2-07 1940	DDX On easting During Llandours		Ma Candan Vauna
R2-07 1990	Uses Dises handling during inter aND UQ		Mr. Londoon Young
R2-07 1973	User Plane handling during inter-end HU		Mr. Jagdeep Singh
R2-071974	Resource allocations in target cell after Handover	NEG	Wr. Jagdeep Singn
R2-071975	Hext Proposal for Intra-LIE Handover	NEG	Mr. Jagdeep Singh
R2-071977	ROHC reset during inter-eNB handover	Nortel	
RZ-0/19/8	Inter end nandover in a synchronous network	Nortel	
R2-0/19/9	Forward Hand-Off Need, Simulations results	Nortel	
R2-071980	Forward Hand-Off options	Nortel	
R2-071982	Admission Control at Target eNB	Nortel	
R2-072003	Handover Interruption Times and Duration	Motorola	

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R2-07200 4	RACH Preamble Reservation for Handover	Motorola		
R2-072036	UL time synchronized handover	Samsung		
R2-072037	Gap control in E-UTRAN	Samsung Electronics		
R2-072038	Measurement Gap and DRX interaction	Samsung Electronics		
R2-072045	Support of ROHC and context relocation	NEC	Mr. David Lecompte	÷
R2-072063	Proposals on data handling at inter-eNB handover	NTT DoCoMo, Inc.		
R2-072081	Radio Link Failure	Motorola		
R2-072085	Handover procedure for a low activity UE	LG Electronics Inc.		
R2-072136	On the need of fast and robust handover failure recovery	Ve	rizon Wireless, Nortel	Networks
R2-071719 Revised after	User Plane Data Handling at Handover presentation in R2-072309:	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire	
R2-072309	User Plane Data Handling at Handover		Nokia, Nokia	Siemens Networks
R2-071655 The documer	Discussion on Data forwarding options for intra-LTE Handover at was revised before presentation in R2-072060:	Alcatel	Lucent	
R2-072060	Discussion on Data forwarding options for intra-LTE Handover	Alcatel	Lucent, LG Electronic	8
R2-071752 The documer	consideration on handover interruption time at was revised before presentation in R2-072178:	ZTE	Mr. Zhongda Du	
R2-072178	consideration on handover interruption time		ZTE	Mr. Zhongda Du
4.11.2 L	TE to/from UTRAN			

R2-071659Consideration on the forwarding strategy in the inter-RAT HO scenarioR2-072061Consideration on the forwarding strategy in the inter-RAT HO scenario

4.12 LTE MBMS

R2-071649 Multiple packet loss recovery and RLC PDU format in eMBMS

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Alcatel-Lucent

Alcatel-Lucent

Alcatel-Lucent, LG Electronics

R2-071650	E-MBMS transmission mode selection and switching	Alcatel-Lucent	
R2-071651	Service scheduling for E-MBMS combining	Alcatel-Lucent	
R2-071652	Support of scalable codec for E-MBMS	Alcatel-Lucent	
R2-071653	Transmission of E-MBMS control information	Alcatel-Lucent	
R2-071700	LTE MBMS User Detection Scheme	Freescale Semiconductor Inc	
		Nokia, Nokia Siemens	
R2-071733	MBMS Agreements	Networks, Samsung	Mr. Benoist Sébire
R2-07173 4	MCCH Control	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire
R2-071735	Inter-layer notification	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire
R2-071736	Open issues in requirements from multi-cell content synchronization solutions	Nokia, Nokia Siemens Networks	Mr. Benoist Sébire
R2-071765	E-MBMS scheduling	QUALCOMM Europe	Dr. Nathan Tenny
R2-071776	MCCH Transmission in LTE	Panasonic	
R2-071777	Uplink feedback for eMBMS SFN operations	Panasonic	
R2-071788	MBMS Network Optimization	huawei	
R2-071825	Mapping of MBMS logical channels to DL-SCH	Ericsson	Mr. Janne Peisa
R2-071826	Multiplexing of MBMS services	Ericsson, Samsung	Mr. Janne Peisa
R2-071827	LTE MBMS functionality	Ericsson	Mr. Janne Peisa
R2-071828	DL-SCH supporting single cell PTM with HARQ/CQI	Ericsson	Mr. Janne Peisa
R2-071829	Transmission of MCCH	Ericsson	Mr. Janne Peisa
R2-071872	MBMS notification in E-UTRAN	CATT	Mrs. Haiyang Quan
R2-071873	MBMS control signalling in E-UTRAN	CATT	Mrs. Haiyang Quan
R2-071880	Active Recovery of MBMS Data	LG Electronics Inc.	
R2-071889	MBMS User authentication	LG Electronics Inc.	
R2-071910	Counting in E-MBMS	IPWireless	
R2-071919	LTE MBMS Notifications	LG Electronics Inc.	
R2-071922	LTE MBMS Transmission	LG Electronics Inc.	
R2-071962	Polling Performance for LTE MBMS	RIM	Mr. Gordon Young
R2-071963	MCCH Design	RIM	Mr. Gordon Young
R2-07196 4	Multi-Stage Setup for LTE MBMS Transmissions	RIM	Mr. Gordon Young
R2-071966	The further discussion on eMBMS scenarios of deployment	China Mobile	
R2-071967	Use of eMBMS uplink feedback	China Mobile	
R2-071981	Hierarchical MCCH	Nortel	
R2-071983	Discussion of eMBMS Uplink Feedback Schemes	NEC	Mr. Jagdeep Singh Mr. Stanislas
R2-071988	CQI reporting in E-MBMS single cell transmission	Alcatel-Lucent	Bourdeaut
R2-071998	Considerations on MBMS Resource Allocation	Motorola	
R2-071999	Multicell EMBMS CQI Feedback	Motorola	
R2-072000	Further Results on EMBMS Transmission Configurations	Motorola	
R2-072005	Considerations on uplink feedback channel for E-MBMS	ETRI	
R2-072007	Additional results on over-provisioning required to accommodate overlapping	Motorola	

SFN areas

R2-072025 Uplink Feedback for E-MBMS R2-072082 R2-072083

Random Access for LTE MBMS

Random Access for LTE MBMS

R2-072141 ROHC for E-MBMS

R2-071733 **MBMS** Agreements Revised after presentation in 2274:

R2-072274 MBMS Agreements Revised after presentation in R2-072314:

R2-072314 MBMS Agreements

The document was presented by Jarko from Nokia. **Discussion:** "All dynamically configured" may be changed by "ffs". This needs to be checked further. Decision: The proposal was agreed in R2-072317.

4.13 Other LTE Stage 2 subjects

On setting the C-RNTI in RACH message two
Byte alignment for RLC and MAC headers?
MAC and RLC delivery notification
Automatic paging power control
VoIP Optimized DRX control
Discussion on RAN implications of Equivalent Tracking areas
RLC PDU header structure in case of re-use of PDPC SN for RLC SN
Interaction of DRX and downlink HARQ in LTE
Consideration on the polling request for the isolated or last data transmission in
LTE
UE assisted tracking area update
Optimization of RB establishment

Motorola LG Electronics Inc. LG Electronics Inc.

Motorola

Nokia, Nokia Siemens Networks, Samsung

> Nokia, Nokia Siemens Networks, Samsung

> Nokia, Nokia Siemens Networks, Samsung

Nokia Siemens Networks InterDigital InterDigital NEC NEC Alcatel-Lucent Alcatel-Lucent Alcatel-Lucent

Alcatel-Lucent LG Electronics Inc. LG Electronics Inc. Mr. Stephen Terry Mr. Stephen Terry Mr. David Lecompte Mr. David Lecompte

Mr. Patrick Fischer Mr. Patrick Fischer

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		Nokia, Nokia Siemens	
R2-071723	Requirements for Redirection	Networks	Mr. Benoist Sébire
D0 074704	Link Lovel Makilto Drinsiales in a Listeranova Maturali	Nokia, Nokia Siemens	Ma Densist Office
R2-0/1/24	High Level Mobility Principles in a Heterogeneous Network	Networks	WIR. Benoist Sebire
D2 071725	Access Bines Lise Cases	Nokia, Nokia Siemens Networke	Mr. Popoiet Sóbiro
RZ-07 1720	ACCESS FIPES USE CASES	NEC Nokia Nokia	IVII. DEHDISL JEDITE
R2-071720	HARO-ARO interactions	Siemens Networks	Mr. Ronoist Sóhiro
112 07 1720		Nokia Nokia Siemens	WIT. Derivist Ocbire
R2-071730	MAC Header Structure	Networks	Mr. Benoist Sébire
		Nokia, Nokia Siemens	
R2-071731	RLC Header Structure	Networks	Mr. Benoist Sébire
		Nokia, Nokia Siemens	
R2-071740	Control of UE measurements for Network Configuration	Networks	Mr. Benoist Sébire
		Nokia, Nokia Siemens	
R2-071743	Further considerations on DL semi-persistent scheduling	Networks	Mr. Benoist Sébire
R2-071753	DRX mode transit model	ZTE	Mr. Zhongda Du
R2-071778	PDCP SN reuse in RLC PDU for LTE	Panasonic	
R2-071779	UL HARQ Protocol issues	Panasonic	
R2-071780	RLC TM mode for U-Plane	Panasonic	
R2-071781	MAC PDU format for LTE	Panasonic	
R2-071782	Security Context Information and Security Functionality for LTE	Panasonic	
R2-071783	DRX handling issues in LTE	Panasonic	
R2-071789	LTE RLC functions and services	huawei	
R2-071796	On the issue of HARQ/ARQ interaction	LG Electronics Inc.	
R2-071803	Considerations on SRB establishment	QUALCOMM Europe	
R2-071804	Camping load balancing in LTE	QUALCOMM Europe	
R2-071805	Optimization for Tracking Area Update signalling	QUALCOMM Europe	
R2-071830	A Semi-Autonomous DRX Control Scheme for LTE_ACTIVE	Ericsson	Mr. Janne Peisa
R2-071831	On Intra-LTE Cell Reselection Methods	Ericsson	Mr. Janne Peisa
R2-071832	Radio Resource Management Aspects of Inter-RAT Handovers	Ericsson	Mr. Janne Peisa
R2-071833	On Inter-RAT Cell Reselection Principles	Ericsson	Mr. Janne Peisa
R2-07183 4	PDCP PDU header formats in LTE	Ericsson	Mr. Janne Peisa
R2-071835	Support for ROHC in SAE/LTE	Ericsson	Mr. Janne Peisa
R2-071836	Configuration of PDCP in SAE/LTE	Ericsson	Mr. Janne Peisa
R2-071837	L2 Sequence Number in LTE	Ericsson	Mr. Janne Peisa
R2-071838	HARQ Configuration for LTE	Ericsson	Mr. Janne Peisa
R2-071839	Byte alignment for user plane protocols in LTE	Ericsson	Mr. Janne Peisa
R2-071841	Resource fragmentation in LTE uplink	Ericsson	Mr. Janne Peisa
R2-071842	Clean up of Stage 2 FFS	Ericsson	Mr. Janne Peisa
R2-071843	NDI-less HARQ operation	Ericsson	Mr. Janne Peisa
		2	

Draft1 minutes	s of the 58 th TSG-RAN WG2 meeting		
R2-071844	HARQ-ARQ Interactions for NACK to ACK error	Ericsson	Mr. Janne Peisa
R2-071846	Number of logical channels in RB	LG Electronics Inc.	
R2-071847	CQI Reporting with regards to DRX operation	Ericsson	Mr. Janne Peisa
R2-071848	Discussion on Uplink Traffic Shaping	LG Electronics Inc.	
R2-071849	PDCP Sequence Number and ROHCv2	LG Electronics Inc.	
R2-071871	Downlink HARQ Error Detection in LTE	CATT	Mrs. Haiyang Quan
R2-071878	Discussion on short transaction time	LG Electronics Inc.	
R2-071886	Discussion on MAC PDU structure	LG Electronics Inc.	
R2-071887	Scheduling consideration on L2 Headers	LG Electronics Inc.	
			Mr. Gert-Jan van
R2-071901	CQI handling during DRX	Samsung	Lieshout
			Mr. Gert-Jan van
R2-071904	Idle mode paging	Samsung	Lieshout
R2-071905	Optimization of downlink persistent scheduling	EIRI	
B2 071000	III. control transmissions during DPX	Samauna NTT DoCoMo	Wr. Gert-Jan Van
R2-07 1908	DLC DDLL format for LTE	Banagania	LIESHOUL
R2-07 1913		Fanasonic	Mr. Himko van dor
R2-071914	Radio connection establishment	Samsung	Velde
		Cambang	Mr. Himke van der
R2-071915	Use of tracking area- and cell identity for private networks/home cells	Samsung	Velde
		Ū.	Mr. Himke van der
R2-071916	Neighbouring cell information	Samsung	Velde
R2-071925	Label characteristics and PBR for non-GBR	IPWireless	
R2-071926	Transmission of LTE Paging	LG Electronics Inc.	
R2-071927	Paging group indication	IPWireless	
		Samsung, LG Eletcronics	Mr. Himke van der
R2-071932	Registration on home & private eNBs	Inc.	Velde
R2-071942	ACK to NACK error detecting mechanism	LG Electronics Inc.	
R2-071943	Discussion on need-based adaptive HARQ in E-UTRAN UL	LG Electronics Inc.	
R2-0719 44	Transition indicator for VoIP in UL	LG Electronics Inc.	
		I-Mobile, NTT DoCoMo,	
		APN, UNINA MODILE, Oranga Vadafana Sprint	
		Tolocom Italia, Tolofónica	
		Huawei Infineon Nokia	
	UE Support for self-configuration and self-optimisation - Proposal for Stage2	Nokia-Siemens Networks,	
R2-071947	(only RAN2 relevant part)	Samsung	Mr. Axel Klatt
		T-Mobile, Vodafone,	
		Orange, Telecom Italia,	
R2-071948	Generic 'subscriber type' indication via S1 interface	Telefónica	Mr. Axel Klatt
R2-071952	The Urgency of HARQ-ARQ Interactions	ITRI	

Draft1 minutes	Draft1 minutes of the 58 th TSG-RAN WG2 meeting						
R2-071953	A New Measurement to Support UL Scheduler Operation	Mitsubishi Electric Corp.					
R2-071959	Adaptive Modulation and Coding for LTE VolP	RIM	Mr. Gordon Young				
R2-071969	Paging Procedure in LTE	NTT DoCoMo, Inc., NEC					
R2-071976	Clarification on use of Prioritized Bit Rate (PBR)	NEC	Mr. Jagdeep Singh				
R2-07198 4	HARQ/ARQ Interactions	Philips	Mr. Paul Bucknell				
R2-071989	Idle Gaps for Handover Measurements in E-UTRAN	Ericsson	Mr. Janne Peisa				
R2-071990	DRX procedure for VoIP	QUALCOMM Europe					
R2-072006	RLC header design	Motorola					
		NTT DoCoMo, Orange, Tele	ecom Italia, Telefonica, T-				
R2-072011	Rationale for standardising eNB measurements	Mobile, Vodafone					
R2-072013	MAC header for control message in LTE	ASUSTeK					
R2-072015	MAC PDU structure for LTE	NTT DoCoMo, Inc.					
D0 070040			Mr. Etienne				
R2-072019	Gryptosync in Life	Qualcomm Europe	Graponniere Mr. Etionno				
R2-072024	PDCP reordering		IVII. Ellenne Chanonnière				
R2-072024	First quantification of LIL control	Sameung	onuponniere				
R2-072040	PDCP SN and RLC SN						
R2-072043	Location of DL PDCP Reordering in LTE during Handover	Fuiteu					
R2-072044		Friceson	Mr. Janne Peisa				
R2-072046	UE specific Intra-ITE (interfrequency) and inter-RAT cell reselection	NEC					
R2-072055	RIC beader format	Fuiteu					
R2-072064							
R2-072004	SAE Bearer and SAE Radio Bearer Independence	Vodafone Group					
R2-072076	Network Specific Mandatory Default	Vodafone Group					
R2-072077	Initial Standardisation Requirements from Self-Organizing Networks	Vodafone Group T-Mobile					
R2-072078	RRM framework in the LTE architecture	Vodafone Group, Telecom J	talia Orange KPN				
R2-072087	Considerations on ROHC feedback for L2 design	LG Electronics Inc.	talia, orango, ta ta				
P2 072007	Discussion of Access Control Requirements for Home allode	Vodafono Group					
R2-072071	Discussion of Mobility Requirements for Home-eNodeB	Vodafone Group					
112 012011	Discussion of Mobility Requirements for Home chouce	Voucione Group					
R2-071665	Discussion on Security mode control for LTE	Alcatel-Lucent					

R2-072023 Number of HARQ processes

Qualcomm Europe

Mr. Etienne Chaponnière

Choice needed between Semi-persistent, persistent, or group (e.g. see required power at cell edge): Current default would be dynamic non adaptive.

Question asked: Semi-persistent: 14. Group (multiple UEs in one message): 7. Wait for the next meeting: 1.

Decision: Semi-persistent. Dynamic can overwrite the semi persistent. R2-071745.

R2-071745 Text Proposal for UL Scheduling The document was presented by Benoist Sebire from Nokia. **Discussion:** Text on retransmission to be rephrased. Some 'ffs' will be removed. Decision: The proposal was agreed in R2-072324.

All Stage 3 specs. to be agreed by email before a conference call.

CATT, Elektrobit, Ericsson, Fujitsu, ITRI, LGE, Mitsubishi, Nokia, Nokia Siemens Networks, NTT DoCoMo, Samsung

Mr. Benoist Sébire

Stage 3: rapporteur inputs (based on the stage 2 status) 4.14

R2-071972 36.306 E-UTRA UE Radio Access Capabilities

Motorola (Rapporteur)

Mr. Richard Burbidge

4.14.1 MAC

		LG Electronics Inc., Nokia, NOKIA SIE	EMENS
R2-071705	Byte alignment for L2 headers	NETWORKS, Samsung, Texas Instrui	ments Inc
R2-071707	PDCP/RLC/MAC header format	Samsung	
R2-071997	MAC specification - Editors	Ericsson, QUALCOMM Europe	Mr. Janne Peisa

4.14.2 RRC

R2-071921	RRC skeleton	Rapporteur (Samsung)	Mr. Himke van der V	elde
R2-072066	Text proposal for RRC chapters: Procedures and Protocol data unit	its Samsung	Mr. Himke van der V	'elde
R2-072196	Status of "Service provided by physical layer" specification		Alcatel-Luce	ent
R2-071924 The documer	Text proposal for RRC chapter: General at was revised before presentation in R2-072206:	Samsung	Mr. Himke van der V	/elde
R2-072206	Text proposal for RRC chapter: General		Samsung	
R2-072207	Text proposal for RRC chapter: Procedures and Protocol data unit	S	Samsung	Mr. Himke van der Velde
4.14.3 F	PDCP			
R2-071678	Open issues for PDCP specifications	LG Electronics (rapporteur)	Mr. Patrick Fischer	
R2-071679 The documer	Updated PDCP skeleton specification at was revised before presentation in R2-072256:	LG Electronics (rapporteur)	Mr. Patrick Fischer	
R2-072256	Updated PDCP skeleton specification	LG Elect	t ronics (rapporteur)	

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 R2-071708
 Variable size RLC SN

 R2-071709
 Lite RLC versus normal RLC

 R2-072039
 E-UTRA RLC specification work outline

4.14.5 Cell selection & re-selection

R2-071713	Skeleton of UE IDLE mode procedures	Nokia (Rapporteur)	M
R2-071714	UE IDLE mode procedures	Nokia, Nokia Siemens Networks	M
		T-Mobile, NTT DoCoMo, Vodafone,	
R2-071949	Support of procedures/features related to intra-frequency mobility	Orange, Telecom Italia	M
	Support of procedures/features related to inter-frequency/inter-	T-Mobile, NTT DoCoMo, Vodafone,	
R2-071950	RAT mobility	Orange, Telecom Italia	M
		T-Mobile, Telecom Italia, Vodafone,	
R2-071951	Stage3 text proposal on idle mode procedures in E-UTRAN	China Mobile	M

4.14.6 Model of the physical layer

No inputs.

Mr. Benoist Sébire Mr. Benoist Sébire

Mr. Axel Klatt

samsung

samsung

Rapporteur

Mr. Axel Klatt

Mr. Axel Klatt

5 UTRA/UTRAN

CRs agreed in principle at RAN2-57bis: The table below summaries the CRs agreed in principle at RAN2-57, together with their outcome at RAN2-58:

RAN2-58	RAN2-57bis	RAN2-58	Title		Spec	CR#	rev	Rel	Source	Outcome at
item	information	tdoc								RAN2-58
5.3.1	R2-071189	R2-071623	"Maximum_Serving_Grant" setting at TTI change	CR	25.321	0317		Rel-7	Panasonic	Agreed
5.4	R2-071152	R2-072216	Enhanced CELL_FACH state in FDD in 25.301	CR	25.301	0084		Rel-7	Nokia	Agreed
5.4	R2-071153	R2-072162	Enhanced CELL_FACH state in FDD in 25.302	CR	25.302	0179	1	Rel-7	Nokia	Agreed
5.4	R2-071162	R2-071691	Enhanced CELL_FACH state in FDD in 25.304	CR	25.304	0156		Rel-7	Nokia	Agreed
5.4		R2-072167 so far	Introduction of Improved L2 support for high data rates and Enhanced CELL_FACH state	CR			2	Rel-7	Nokia	Agreed in principle -
	R2-071555		(was: Enhanced CELL_FACH state in FDD in 25.321)		25.321	0318				come back
5.4	R2-071216	R2-071641	Configuration of RACH measurements in HS-FACH	CR	25.308	0020		Rel-7	Alcatel-Lucent	Withdrawn
5.16	R2-071131	R2-072069	Use of Integrity protection algorithm UIA/2: removal of a 'shall' in a note	CR	25.331	2992		Rel-7	ETSI MCC	Agreed
5.16	R2-071141	R2-072275	Removing an incomplete optimization for RLC operations during HSDPA cell change	CR	25.322	0306		Rel-7	Samsung, Ericsson	
5.16		R2-071639 (source		CR				Rel-7	Samsung, Ericsson	agreed
	R2-071212	changed)	PDCP variables handling at SRNS relocation		25.323	0302				
5.16	R2-071218	R2-071632	Cell identifier encoding alignment	CR	25.331	2993		Rel-7	Alcatel-Lucent	agreed
5.16	R2-071311	R2-071680	Correction to signalling connection release at T314/315 expiry	CR	25.331	2994		Rel-7	Motorola	agreed
5.16	R2-071312	R2-071682	Cell Update Confirm with RLC re-establish indicator	CR	25.331	2995		Rel-7	Motorola	agreed
5.16	R2-071321	R2-071898	Correction of STTD Indicator for F-DPCH Tx Diversity	CR	25.331	2996		Rel-7	Ericsson	agreed
5.16	R2-071323	R2-071899	Introduction of GAN PS handover	CR	25.306	0156		Rel-7	Ericsson	agreed
5.16	R2-071324	R2-071900	Introduction of GAN PS handover	CR	25.331	2997		Rel-7	Ericsson	agreed
5.16	R2-071341, no CR	R2-072279		CR	05 004	0000		Rel-7	Nokia	
E 40	presented.	D0.074000			25.331	3028			Friender	
5.10		(source		CR				Rel-7	Encsson	agreed
	R2-071288	changed)	Feature Clean Up: Removal of DRAC leftover		25.331	2998				
5.16		R2-071862		CR				Rel-7	Ericsson	agreed
		(source	S-CCPCH and PCH channel selection for Band IV or Band IX	1]			
	R2-071352	changed)	or Band X		25.304	0157				
5.16		R2-071866		CR				Rel-7	Ericsson	agreed
	R2-071353	(source	Initialisation of CFN calculation for CELL_FACH		25.331	2999				

		changed)								
5.16	R2-071410	R2-071933	Ping-pong control	CR	25.331	3000	F	Rel-7	Ericsson	agreed
5.16	R2-071410	R2-071934	Ping-pong control	CR	25.304	0158	F	Rel-7	Ericsson	agreed
5.16		R2-072042	Optimization of switching beteween MBMS broadcast TV	CR			F	Rel-7	NEC, Ericsson	agreed
	R2-071424		channels transmitted on ptp bearers (MBMS for Mobile TV)		25.331	3001				
5.16	R2-071425	R2-071638	Alignment of tabular to ASN.1 for SIB11/SIB12 and event 1J	CR	25.331	3002	F	Rel-7	NEC, Ericsson	agreed
5.16	R2-071426	R2-071640	Correction of Out of Sequence Reception function	CR	25.322	0307	F	Rel-7	NEC, Ericsson	agreed
5.16	R2-071437	R2-071760	DAR over CCCH	CR	25.322	0308	F	Rel-7	NEC, Ericsson	agreed

R2-071902 Release-7 dependencies

The document was presented by (...) from Samsung. **Discussion:**

Figure: Fractional DPCH requires to support EDCH.

The feature is also supported by TDD.

Enhanced L2 needs to be known at the RRC Connection request.

This is a proposal of what could be optional, not of what is optional: Title for table 1 is misleading.

Decision: The document was revised in R2-072291, LS to TSG RAN.

This will be reported to the plenary as the RAN2 understanding.

5.1 Incoming LSs on UTRA Rel-5

R2-072108 (R1-071249, to RAN2). Reply LS (to R2-070953) on High Bit Rate SRB The document was presented by Cyrille Royer from Alcatel-Lucent. **Discussion:**

To be checked.

Decision: The document was noted.

Note: It was reported later-on that the related CR, 25.993 CR 0093, has already been approved at RAN-35 (and incorporated in the specification), as the LS R1-071249 was approved by email by RAN1 and received after RAN2-57 but before RAN-35 (25.993 CR 0093, R2-070952 was technically endorsed by RAN2-57, and the earlier LS from RAN2 to RAN1 on the subject was R2-070953).

5.2 UTRA Items treated in e-mail discussion (rapporteur report only)

No input.

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Samsung, Ericsson, Motorola, Nokia, NSN

RAN WG1

Alcatel-Lucent

5.3 **Release 6 corrections**

5.3.1 **FDD Enhanced Uplink**

R2-072097(C1-070886, to RAN2). Reply LS (to R2-071107) on Maximum SDU sizeR2-072115(S2-072217, to RAN2). Reply LS (to R2-071107) on Maximum SDU sizeThe LSs were presented by Hakan Palm from Ericsson. Discussion:Decision: The documents were noted.	CT WG1 SA WG2		Ericsson Ericsson
R2-071623 "Maximum_Serving_Grant" setting at TTI change Was already agreed in principle at RAN2-57bis. The document was presented by Joachim Lohr from Panasonic. Discussion: Decision: The CR was agreed as it was.	CR	0317 25.321 Rel-7	Panasonic
R2-071645 Correction on E-TFC selection and Serving Grant The document was presented by Cyrille Rover from Alcatel-Lucent	CR	25.321 Rel-6	Alcatel-Lucent

ted by Cyrille Royer from Alcatel-Lucent Discussion:

3 solutions: No further clarification (and the network would need to cater for the worse case), or define a largest E-TFC permitted to select based on serving grant payload (accepting that some UEs may select smaller E-TFC values), or specify one and only one behaviour in the spec (option C). In this latest case, either 1 bit quantization or use of E-TFC table (option C-2).

Prediction of the overall resource in the uplink is very useful for the network, hence the first choice was ruled out.

Decision: The document was noted.

R2-071850	Clarification on E-DCH Scheduled Grant Payload Calculation	CR	25.321 Rel-6	Ericsson	Mr. Janne Peisa
The document	nt was presented by Enrik Enbuske from Ericsson.				

Discussion:

Bit Id would need to be calculated for the payload.

This would add the requirement on the reference E-TFC that the Bit Id would need to be monotonously increasing for each payload, with a one bit granularity.

This would not be enough to be used in conjuntion with the "largest permitted E-TFC" solution.

Decision: The document was noted. This will be discussed again on the Thursday afternoon. Some issues are still to be resolved before that this approach is considered acceptable. Otherwise, option C-2 from discussions of R2-071645 would be a fallback solution. But any option C would need to be introduced from the Rel-6. Later-on, a revision was proposed in R2-072227:

 R2-072227 Clarification on E-DCH Scheduled Grant Payload Calculation The document was presented by Henrik Enbuske from Ericsson. Discussion: Decision: The CR will be <i>agreed by email</i> until Thursday 17th May 2007. In R2-072327, R Enbuske, Ericsson. 	CR 2-0723	28, CR	25.321 F s 0325, 0326	Rel-6 5 (Rel-6,	Ericsson Rel-7). Rapporteur: Enrik
 R2-071701 HSUPA configurations for VoIP and multimedia telephony The document was presented by David Lecompte from NEC. Discussion: End of subclause 9.2.2.9: RLC SDU concatenation may solve the issue for the payload. One solution would be to describe in 25.993 and 34.108 the usage of the described configuration for 25.321/25.322. For 25.993/34.108, intended use of the configuration (scheduled/non-scheduled) will be class A note will be added stating that the UE should choose RLC PDU sizes to maximise the ar For the TBS: the amount of RLC header to be included in the TEBF value can only be an a Decision: The document was noted. A note will be added in 25.321 (or 25.322), stating that the UE should choose RLC PDU sizes R2-072154. <i>It is understood that the RLC header contribution to the TEBS value is an approximation.</i> 	ration. arified. 1 nount or upproxin izes to n	Non-sc f data v nation. naximi:	NEC heduled grar vithin a TTI. se the amoun	nt nt of data	Mr. David Lecompte a within a TTI. For the Rel-6. In
 R2-072154 RLC PDU Size for maximisation of data The document was presented by David Lecompte from NEC. Discussion: Are the consequences if not approved correct ? They will be revised. RAN box needs to be ticked. This is putting an RLC requirement in the MAC. This is intended to be a recommentation. Decision: The CR was agreed in R2-072288, CR 0320. The Rel-7 CR is in R2-072329, CF R2-071747 Correction of Serving Grant Update Procedure in E-DCH R2-071748 Correction of Serving Grant Update Procedure in E-DCH The document was presented by Miss Hui Chen from ZTE Discussion: 	CR 8 0327.	25.32 CR CR	1/25.322 25.321 Rel- 25.321 Rel-	NEC 6 7	ZTE ZTE

Decision: The document was noted. This may be discussed for the Rel-7 (not the Rel-6). A potential Rel-7 solution will be discussed off-line or for the next meeting.

R2-071749 Consideration of RG-STEP Size in E-DCH	CR		ZTE		Mr. Zhongda Du
The document was presented by Miss Hui Chen from ZTE					
Discussion:					
This is not an essential correction for the Rel-6. Further releases may be discussed	later.				
Decision: The document was noted. This is not an essential correction for the Rel-	6. Fu	rther releases may	be discuss	sed later.	
R2-071935 E-TFC selection clarifications	CR	25.321 Rel-6	Nokia		Mr. Simone Provvedi
The document was revised before presentation in R2-072150:					
R2-072150 E-TFC selection clarifications		CR 25.32	1 Rel-6	Nokia	
The document was presented by Simone Provvedi from Nokia.					
Discussion:					
Open points:					
1- conflicting requirements in 25.331. Priority versus type of data.					
The majority of companies would prefer the respect of priorities, whether schedule	d or i	non-scheduled (i.e	e. irrespecti	ve of data	a type).
One case mentionned is VoIP on non-scheduled grant, with SRB using scheduled g	grant.		-		
Point 1 Open.	-				
2- Decision: Agreed. What needs to be quantised is the full MACe PDU.					
3- Adressed by Ericsson/Alcatel-Lucent contributions.					
4- quantisation on scheduled/non-scheduled: conflict.					
Point 4 Open.					
5- quantised versus quantised down. Non-scheduled data: quantised up only.					
Decision: Agreed. Quantised down.					
6- priority versus padding.					
Dependent on issue 1.					
Case of an SRB as scheduled transmission was mentionned.					
Decision: The document was noted. This would be discussed again on the Thursda	ıv.				
A revision was later-on proposed in R2-072214:					
1 1					
R2-072214 E-TFC selection clarifications		CR	25.321	Rel-6	Nokia
The document was presented by Simone Provvedi from Nokia.					
Discussion:					
This new version did not change the behaviour.					
The real issue is point A2.					
1					
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There is a conflict in the requirements in the current text.

Decision:

Some companies favour the support of absolute priorities.

There is some support for the CR, but more time would be needed. The CR was not agreed.

R2-072152 Measurement Reporting criteria IE in ASN.1 Rel-6

The document was presented by Juho Pirskanen from Nokia Siemens Networks. **Discussion:**

What would be the consequence of not having the reporting criteria as optional ?

This deals with intra frequency report criteria.

Decision: This will be studied off-line and would be seen again on the Thursday.

Later-on, it was reported that an optional bit would change the syntax, so another solution will be preferred (e.g. explain the Rel-6 branch limitation with notes).

Nokia Siemens Networks

R2-072053	Multiplexing option selection in case of E_DCH_TRANSMISSION equal FALSE	CR	25.331 Rel-6	Infineon	Mr. Roland Gruber
R2-072054	Multiplexing option selection in case of E_DCH_TRANSMISSION equal FALSE	CR	25.331 Rel-7	Infineon	Mr. Roland Gruber
The documer	nt was presented by Roland Gruber from Infineon.				

Discussion:

The transmission variables do not influence the radio bearer mapping, they are independent. **Decision:** The document was noted.

5.3.2 MBMS

	(C1-070887 to RAN2) Reply I S (to R2-071097) on RRC connected mode during		
R2-072098	MBMS enhanced broadcast	CT WG1	Samsung
	(S2-072224, to RAN2). Reply LS (to R2-071097) on RRC connected mode during		0
R2-072124	MBMS enhanced broadcast	SA WG2	Samsung
The document	t was presented by () from Samsung.		
Discussion:			

SA2 has chosen the UE based solution. There is a CR on the subject (R2-071851, Ericsson) **Decision:** The document was noted.

Draft1 minutes of the 58 th TSG-RAN WG2 meeting					
(R3-070499, to RAN2). LS on Clarification on two scenarios "Enhanced R2-072109 fromBroadcast over lur" The document was presented by Juho Pirskanen from Nokia Siemens Networks.	RAN	N WG3 N	lokia Siemens letworks		
Discussion: This does not appear as a critical Rel-6 correction					
Decision: The document was noted. RAN WG3 will be asked in an LS if they want to cove	er the cas	se for the Re	l-7 (Alcatel-Li	(cent), in l	R2-072242.
				,,,	
R2-072151 MBMS Services naming	CR	2 2	5.346 and 5.331 Rel-6	Nokia	Mr. Simone Provvedi
Discussion:					
Decision: The document was noted.					
R2-071757 MBMS services information on DCCH The document was revised before presentation in R2-072159:			ZTE	M	r. Zhongda Du
R2-072159 MBMS services information on DCCH The document was presented by () from ZTE.				ZTE	Mr. Zhongda Du
Discussion: Decision: The document was noted. Later-on, the document was withdrawn.					
R2-071647 MBMS Notification The document was revised before presentation in R2_072140.				Noki	а
The document was revised before presentation in R2-07214).					
R2-072149 MBMS Notification	CR	25.331 Rel-6	6 Nokia		
The document was presented by Simone Provvedi from Nokia. Discussion:					
This is a change in the Rel-6.	6.1	c			
What if the UE implements this CR and the network not? The UE would miss the change of shows at that we many evicts	of the co	onfiguration	if it changes in	the meant	time and look for a
Channel that no more exists.	of the in	mplementati	o/non_impleme	entation or	n the UE/Network
side. In R2-072241 (Nokia):	of the h	inprementati	o/non-impleme	intation of	
R2-072241 Consequences of implementation/non-implementation of MBMS Notification CR				Nokia	
Discussion:					
UE behaviour is changed for the Rel-6.					
Decision: The CR will be agreed by email. Raporteur (Ericsson, Hakan). In R2-072290, CH	R 3033.	Rel-7 CR in	R2-072330, C	R 3040.	
R2-071755 Minor correction on MBMS text The document was revised before presentation in R2-072170:	CR 25.331 Rel6	ZTE	Mr. Zhongda Du		
---	---------------------	-----------------	---------------------		
R2-072170 Minor correction on MBMS text The document was presented by Mr. () from ZTE. Discussion: First change in 8.7.1.1 should not be here. Decision: The CR was agreed in R2-072220, CR 3006. Rel-7 CR in R2-072	CR 331, CR 3041.	25.331 Rel-6	ZTE Mr. Zhongda Du		
R2-071634 MBMS UE linking for enhanced broadcast mode The document was revised before presentation in R2-072174: R2-072174 MBMS UE linking for enhanced broadcast mode The document was presented by David Lecompte from NEC. Discussion:		NEC NEC	Mr. David Lecompte		
R2-071636 MBMS counting completion The document was presented by Stanislas Bourdeaut from Alcatel-Lucent. Discussion: Decision: The document was noted.		CR 25.331 Rel-6	Alcatel-Lucent		
R2-071676 Requirement of simultaneous reading of MCCH and MICH The document was presented by Patrick Fischer from LG Electronics. Discussion: Decision: No agreed change for the Rel-6, however a solution will be discussed.	ssed for the Rel-7.		LG Electronics Inc.		
 R2-071683 MBMS Scheduling Information The document was presented by Jean-Aicard Fabien from Motorola. Discussion: '0' means the current TTI. This should be clarified. Decision: The CR was revised in R2-072218. CR3005: 		CR 25.331 Rel-6	Motorola		

Draft1 minutes of the 58 th TSG-RAN WG2 meeting R2-072218 MBMS Scheduling Information Richard Burbidge. The CR was agreed as it was. Rel-7 CR in R2-072323, CR 3039.	CR	3005	2	5.331 Rel-6	Motorola
 R2-071685 MSCH transmission - alignment to stage 3 The document was presented by Jean-Aicard Fabien from Motorola. Discussion: Decision: The CR was agreed in R2-072219, CR 0028. Rel-7 CR in R2-072332, CR 0029. 			CR	25.346 Rel-6	Motorola
R2-071686 MBMS UE Capability for mapping MTCH/MSCH to legacy S-CCPCH The document was presented by Jean-Aicard Fabien from Motorola. Discussion: This has not been discussed within RAN WG1. Decision: The CR was not agreed.			CR	25.306 Rel-6	Motorola
 R2-071851 Maintenance of PMM connection for MBMS PTP reception The document was presented by Hakan Palm from Ericsson. Discussion: PDP context would be active in PMM connected, so the UE requirement may not be so clear. procedure may be clearer. Linked with a 24.008 CR. Decision: The CR was agreed in R2-072221, R2-072223. CR 3007, 3008. 	Expl	icitely 1	CR nentio	25.331 Rel-6	Ericsson
 R2-071852 Content of MSI message when sent on DCCH The document was presented by Hakan Palm from Ericsson. Discussion: The UE behaviour as a reply to the 'None' in the "MBMS required UE action" IE is no action Decision: The CR was agreed in R2-072230, R2-072231. CRs 3009, 3010. 			CR	25.331 Rel-6	Ericsson
R2-071756 Consideration on MBMS Required UE action The document was revised before presentation in R2-072158:				ZTE	Mr. Zhongda Du
R2-072158 Consideration on MBMS Required UE action The document was presented by Zhongda Du from ZTE.				:	ZTE

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Discussion:				
The change is not needed.				
Decision: The CR was not agreed.				
R2-071853 Relative ordering of MBMS Selected Services when indicated to the network The document was presented by Sven Ekemark from Ericsson. Discussion:	CR	25.331 Rel-6	Ericsson	Mr. Janne Peisa
TV and several alternative audio channels may be possible.				
Coversheet needs to be corrected to reflect the idea of the CR more accurately. Decision: The CR was agreed, in R2-072232, R2-072233. CRs 3011, 3012.				
R2-071854 Background scan during MBMS PTM reception The document was presented by Hakan Palm from Ericsson.		CR	25.331 Rel-7	Ericsson
Discussion:				
Decision: The CR was agreed, in R2-072234. CRs 3013.				
R2-071936 Default MBMS activation time and 'MBMS all unmodified p-t-m services' The document was presented by Simone Provvedi from Nokia.	CR	25.331 Rel-6	Nokia	Mr. Simone Provvedi
One view was that the next modification period is specified in the procedure, triggered by exact activation time (immediately or not).	the 'u	unless specified	otherwise'. Henc	e, different views on the
The worse that could happen is a loss of data for less than one modification period. Decision: The CR was agreed in R2-072235, R2-072236. CR 3014, 3015.				
R2-072027 Corrections on modulus base in UM in RLC The document was presented by Sam Jiang from ASUSTek.		CR	25.322 Rel-6	ASUSTeK
The wording should be made clearer (in several places)				
Out of sequence delivery, reception, reordering.				
First proposed change on VR(UM) needs to be removed.				
The 'minus' are not necessary in two places. But then, the reuirement is already clear.				
Decision: This may be clarified off-line. The CR was not agreed. Later-on, a revision was	s pres	ented:		
Optimization of switching between MBMS broadcast TV channels transmitted on R2-072059 ptp bearers (MBMS for Mobile TV) The Rel-7 related CR (3001) was agreed in principle at RAN2-57bis.	CR	25.331 Rel-6	NEC	Mr. David Lecompte

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The document was presented by David Lecompte from NEC. Discussion: This is a category C CR. What is the exact gained latency ? Decision: The Rel-6 CR was not agreed.		
R2-072068 Problem with the IE 'MBMS service identity' included in the IE 'RAB info' The document was presented by Sven Ekemark from Ericsson. Discussion: Decision: The CR was agreed, in R2-072238, R2-072239. CR 3016, 3017.	CR 25.331 Rel-6 Ericsson	Mr. Sven Ekemark
5.3.3 Other		
R2-071642 Addition of RAB combinaison for SRB mapped on DL "HSDPA + DCH" The document was presented by Cyrille Royer from Alcatel-Lucent. Discussion: What if there is no support of HSDPA at cell edge, and user data on hsdpa ? Answer the be lost, so the call would not be dropped. Decision: Revised in R2-072244. CR0094:	CR 25.993 Rel- at some user data packets would be d	6 Alcatel-Lucent ropped, but the SRB would not
R2-072244 Addition of RAB combinaison for SRB mapped on DL "HSDPA + DCH" The document was presented by Cyrille Royer from Alcatel-Lucent. Discussion: Release is Rel-7, but the WI does not need to be TEI7. Decision: The CR was agreed in R2-072292 (CR0094rev1).	CR 0094 25.993 Rel-6	Alcatel-Lucent
 R2-071648 ROHC Compression status The document was presented by Juho Pirskanen from Nokia Siemens Networks. Discussion: Decision: First point (proposed re-wording in clause 2): was agreed. Second point may be discussed off-line. A 25 306 Rel-6 CR will be proposed in R2-072245. R2-072246. CR 0157. 0158: 	Nokia, Nokia Siemens Nei	tworks Mr. Luis Barreto

Draft1 minutes of the 58th TSG-RAN WG2 meeting CF R2-072245 RoHC Compression Status CF R2-072246 RoHC Compression Status CF The document was presented by Simone Provvedi from Nokia. Discussion: Designor: The CRs were agreed as they were	R 01 R 01	57 58	25.306 Rel-6 25.306 Rel-7	Nokia, Nokia S Nokia, Nokia S	iemens Networks iemens Networks
R2-071706 Correction of SRB delay The document was presented by David Lecompte from NEC. Discussion: These IEs may wrongly be used for EDCH by some networks so this should be clarified Is there a test spec, implication ?	ed.	CR	25.331 Rel-6	NEC	Mr. David Lecompte
Decision: The CR was agreed in R2-072247, R2-072248. CR 3018, 3019. R2-071855 Corrections to support for RFC3095 from Release-6 The document was presented by () from Ericsson. Discussion: The proposal is for the Rel-6. Decision: The document was noted. See R2-071856.			25.323	Rel-6	Ericsson
R2-071856 Update of normative references for Robust Header Compression (RFC3095) The document was presented by () from Ericsson. Discussion: Decision: The CR was agreed in R2-072249, R2-072250. CRs 0303, 0304.)		CR	25.323 Rel-6	Ericsson
R2-071857 Incorrect reference to 25.993 for default configuration 17 The document was presented by Sven Ekemark from Ericsson. Discussion: Decision: The CR was agreed in R2-072251, R2-072252. CR 3020, 3021.			CR	25.331 Rel-6	Ericsson
R2-071859 Removal of redundant IE 'MBMS-PreferredFreqRequest-r6' The document was presented by Sven Ekemark from Ericsson. Discussion: Decision: The CR was agreed for the Rel-7 only. R2-072253. CR 3022.		CR	25.331 Rel-6	Ericsson	Mr. Janne Peisa
R2-072047 Correction to CTFC for default configuration 12		CR	25.331 Rel-6	NEC	Mr. David Lecompte

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The document was presented by David Lecompte from NEC.				
Discussion:				
Default Configuration 12 was introduced in the Rel-6.				
No impact on 34.108 ? No, as 34.108 has only a list of TFCs, not the details of CTFCs.				
Decision: The CR was agreed in R2-072254, R2-072255. CR 3023, 3024.				
R2-072051 START values in cell undate before security is enabled	CR	25 331 Rel-6	Infineon	Mr. Roland Gruber
R2-072052 START values in cell update before security is enabled	CR	25.331 Rel-7	Infineon	Mr. Roland Gruber
The document was presented by Roland Grueber from Infineon.				
Discussion:				
This scenario cannot happen if the cell Update cannot be sent before that the security mode	e comm	and is comple	eted.	
33.102 indicates that the cell update message cannot be sent without integrity protection. H	Iowever	, this is a gre	y area for RRC:	RRC subclause 8.1.12.4a/b
seem to make it possible.				
Why restricting this to the CS domain ?		-		
Decision: Off-line checking is needed (e.g. reason of the 33.102 requirement) for the next	meeting	The CR was	s not agreed.	
R2-0/2028 Clarification on update of state variable VR(UM) The document was presented by Sam Jiang from ASUSTeK	CR 25	0.322 Rel-6	ASUSTEK	
Discussion:				
Do not apply this if the PDU has been discarded is the only point that may be useful. Char	oging the	indentation v	would not chang	e the result.
Decision: The CR was not agreed.	191119 till	macmation	i oura not enung	
5.4 Enhanced CELL EACH State in EDD				
5.4 Enhanced CELL_FACH State III FDD				
(R1-071834, to RAN2). Reply LS (to R2-071098) on physical layer aspects of				Nokia Siemens
R2-072122 enhanced CELL_FACH in FDD	RAN	WG1		Networks
The document was presented by Juho Pirskanen from Nokia.				

Discussion:

RRC Connection release could be sent on CCCH in Cell_FACH State. **Decision:** The document was noted. Reply LS to RAN1 to ask for clarifications, in R2-072156 (Alcatel-Lucent). *Rel-6 UEs support MTCH/SCCPCH reception in Cell_FACH State (FACH/SCCPCH). Hence, Expect MTCH/SCCPCH reception also for Rel-7 UEs in Enhanced Cell_FACH State (HS-DSCH). UE capabilities for MBMS and Enhanced Cell_FACH capabale UEs should reflect this.* Point 2 from the LS is confirmed.

R2-072160 (R1-072547, to RAN2). Reply LS (to R2-071596) on CELL_PCH/URA_PCH operation in Enhanced CELL_FACH The document was presented by Etienne Chaponniere from Flarion Technologies. RAN WG1 Discussion: **Decision:** The document was noted.

R2-071689 state	CR	25.30	No 08 Ne	okia Siemens etworks, Nokia	Mr. Juho	Pirskanen
The document was presented by Juno Pirskanen from Nokia.						
Discussion:						
The mobile sends the measurements it has at the time, it does not wait to have all the me	asure	ments	before s	ending the me	easurement r	eport message.
RACH measurements are made based on information received in the SIB12.						
Decision: The CR was revised in R2-072157. CR0021.						
No direct data transmission in URA_PCH State. Feedback from RAN3 indicated that thi not to support it since RRC is impacted.	s cou	ld be	supporte	d from their p	erspective, b	ut decision in RAN2
R2-072157 Measurement reporting, state transitions, and DRX in enhanced CELL_FACH sta The document was presented by Juho Pirskanen from Nokia.	te	CR	0021	25.308	Nokia Siemen	s Networks, Nokia
Clause 15, fifth paragraph, measurement report triggering on RRC: a condition should be in subclause 15.2).	e intr	oduce	d on the	configuration	of the measu	arement (as described
Decision: The CR was agreed in R2-072261 (CR0021rev1).						
6 , (
R2-071690 Introduction of Enhanced CELL_FACH state in FDD The document was presented by Juho Pirskanen from Nokia. Was already agreed in principle at RAN2-57bis.			C	0084 R	25.301	Nokia Siemens Networks, Nokia
Discussion:						
Decision: The CR was agreed in R2-072216 (CR 0084rev1).						
R2-071692 Introduction of Enhanced CELL_FACH state in FDD The document was presented by Juho Pirskanen from Nokia. Was already agreed in principle at RAN2-57bis. Discussion:			C	0179 R	25.302	Nokia Siemens Networks, Nokia

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One "each" is missing. Sentence on "NAK nor channel quality indicator" should be clarified. The MICH is missing.	
Decision: The CR was agreed in R2-072162 (CR 0179rev1).	
R2-071691 Introduction of HS-DSCH operation in CELL_FACH state CR 25.304 Rel-7 Nokia Siemens The document was presented by Juho Pirskanen from Nokia. Was already agreed in principle at RAN2-57bis. Nokia Siemens Nokia Siemens Discussion: Decision: The CR was agreed as it was. Nokia Siemens Nokia Siemens	I
R2-071875 Introduction of Improved L2 support for high data rates and Enhanced CELL_FACH state CR 25.321 Rel-7 Siemens Networks The document was revised before presentation in R2-072165:	a
Introduction of Improved L2 support for high data rates and Enhanced CELL_FACH Ericsson, Nokia, Nokia, Nokia R2-072165 state CR 0318 1 25.321 Rel-7 Siemens Networks	
The document was presented by Janne Peisa from Ericsson.	
Discussion: 11.6.vv.2:	
MACd or MACc should be clarified.	
Decision: The content on the Cell_FACH part was revised in R2-072167 (CR 0318rev2):	
Introduction of Improved L2 support for high data rates and Enhanced CELL_FACH Ericsson, Nokia, Nokia R2-072167 state CR 0318 2 25.321 Rel-7 Siemens Networks The document was presented by Janne Peisa from Ericsson.	
Re-ordering text is included in R2-072197.	
Re-assembly subclause: For the segments, the term "concatenation" may be misleading: "combining" may be better. Decision: The CR was revised in R2-07258:	
Introduction of Improved L2 support for high data rates and Enhanced CELL_FACH R2-072258 state CR 0318 3 25.321 Rel-7 Ericsson, Nokia, NSN The document was presented by Janne Peisa from Ericsson. Discussion: Dealeigner The CR was agreed as it was	

Decision: The CR was agreed as it was. There will be an *email discussion* on the reordering topic. Rapporteur: Paul Marinier, InterDigital. See R2-072197 (proposed solution).

R2-072197 Solution to reordering issue in Enhanced Cell_FACH InterDigital The document was presented by Paul Marinier from InterDigital. **Discussion:** Decision: The document was noted. Email discussion, deadline one week before the Orlando meeting. Introduction of HS-DSCH reception in CELL_FACH, URA_PCH and Nokia Siemens R2-071693 CR 25.331 CELL_PCH Networks, Nokia Mr. Juho Pirskanen The document was presented by Markus Wimmer from Nokia Siemens Networks. **Discussion:** Subclause 8.1.1.7.1 needs to be modified (e.g. to cover the Cell PCH State). Subclause 8.1.11 needs to be modified: the procedure is also applicable t the Cell PCH case. 8.5.P3 needs to be modified to add a pointer to subclause 8.5.F1. There are some incorrect "Rel-5" in the tabular. A Sentence will be added in the MAC to state that reordering is not applicable to the BCCH. Subclause 8.3.1.2: the case of cell reselection needs to be added. Subclause 8.4.2.2: trafic volume measurement is sent in order to send the measurement results on the RACH. Decision: The CR was revised in R2-072168. CR 3003: R2-072168 Introduction of HS-DSCH reception in CELL FACH, URA PCH and CELL PCH CR 3003 25.331 Rel-7 Nokia Siemens Networks, Nokia The document was presented by Markus Wimmer from Nokia Siemens Networks. **Discussion:** Subclause 8.1.1.7.1, bullet 4: UE in Cell FACH State with common RNTI is excluded here. It should be checked whether this CR clashes with other CRs. Extension of the cell update needs to be cleaned up. Decision: The CR was revised in R2-072257 (CR 3003rev1): Nokia Siemens R2-072257 Introduction of HS-DSCH reception in CELL FACH, URA PCH and CELL PCH CR 3003 1 25.331 Rel-7 Networks, Nokia The document was presented by Markus Wimmer from Nokia Siemens Networks. **Discussion:** Decision: The CR was agreed in R2-072305 (CR3003rev2). Nokia Siemens R2-071694 Introduction of two DRX schemes in CELL PCH and URA PCH CR 25.331 Networks, Nokia Mr. Juho Pirskanen The document was presented by Juho Pirskanen from Nokia Siemens Networks. 67

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Discussion:

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What is the difference in performance between the schemes 1-3 ? Decision: The document was noted. <i>The Maximum time the UE needs to receive is 5 subframes.</i> <i>Minimum retransmission time: 1 subframe. I.e. the retransmission may be in the TTE following the previo</i> <i>HS-SCCH is used for the DCCH case.</i>	ous transmission.	
Other tbd: Transmission: asynchronous, or synchronous to the first transmission ? Choice is tbd.		
There are two potential solutions. PCCH, one for the DCCH/DTCH case. DCCH uses the HS-SCCH. We will come-back on this on Thursday.		
R2-071787 HS-SCCH less operation for Enhanced Paging reception The document was withdrawn (not available) following the discussions of R2-071695.	CR	Qualcomm Europe
R2-072067 Interaction between Quality Reporting on enhanced Cell_FACH and enhanced receivers The document was revised before presentation in R2-072161:		Alcatel-Lucent
Interaction between Quality Reporting on enhanced Cell_FACH and enhanced R2-072161 receivers The document was presented by Stanislas Bourdeaut from Alcatel-Lucent. Discussion:		Alcatel-Lucent
There is motivation for the RNC/NodeB to be aware of the UE receive diversity capability. However, is it possible for the network to make a reliable use of this information if it is reported ? Decision: LS to RAN1/RAN4 to ask the question on the reliable use of the information. In R2-072173 (L	G Electronics).	
 R2-071620 Solutions to reordering issue in enhanced CellI FACH The document was presented by Paul Marinier from InterDigital. Discussion: Decision: The document was noted. <i>Reordering for SRB0/SRB1 will be in the MAC-ehs</i>. 	InterDigital	Mr. Stephen Terry

R2-072209 Text Proposal for Paging in Enhanced CELL_FACH

Nokia Siemens Networks, Nokia, Ericsson, Qualcomm

The document was presented by Juho Pirskanen from Nokia Siemens Networks.

Discussion:

Decision: The change for the URA_PACH was agreed. The principles in the document was agreed. The text, after clarification, will be introduced in the 25.308 CR.

R2-072210 UE capabilities for Enhanced CELL_FACH The document was presented by Juho Pirskanene from Nokia Siemens Networks.	CR	25.306 Rel-7	Nokia Siemens Networks, Nokia
Discussion:			
Category numbering does not cater with the data rate.			
What about category 12 ?			
Decision: The CR was agreed in R2-072306, CR 0161.			

5.5 Improved L2 support for high data rates

R2-071879 Finalizing MAC-ehs			Ericsson	Mr. Janne Peisa
R2-0/2022 L2 improvements and OE processing			Qualcomm Europe	Mr. Ellerine Chaponniere
R2-071874 Correction to the Introduction of Improved L2 support for high data rates	CR	25.301 Rel-7	Ericsson	Mr. Janne Peisa
The document was presented by Janne Peisa from Ericsson.				
Discussion:				
Decision: The CR was agreed in R2-072224, CR0085.				
R2-071876 Introduction of Improved L2 support for high data rates	CR	25.322 Rel-7	Ericsson	Mr. Janne Peisa
The document was presented by Janne Peisa from Ericsson.				
Discussion:				
Subclausw 9.2.2.9: This is a maximum size for PDU.				
Reference to subclause 11.2.2.2 from the setting section needs to be removed.				
Decision: The CR was revised in R2-072211, CR0309:				
R2-072211 Introduction of Improved I 2 support for high data rates		CR 0309	25 322 Rel-7	Friesson
The document was presented by Janne Peisa from Fricsson			LUIULE HUIT	Encocon
Discussion:				
Text should be moved to the receiver subclause (from the sender subclause).				
Subclause 11.3.2, typo (AMD PDU).				

Decision: The CR was revised initially agreed in R2-072260:

<u>R2-072260</u> Introduction of Improved L2 support for high data rates (CR0309rev1), but then revised and agreed in R2-072308 (CR0309rev2).	<u>CR 0309 1</u>	25.322 Rel-7	Ericsson
The document was presented by Janne Peisa from Ericsson.			
Discussion: Decision: The CR was revised and agreed in R2-072308 (CR0309rev2).			
R2-071877 Introduction of Improved L2 support for high data rates The document was presented by Janne Peisa from Ericsson. Discussion: Decision: The CR was revised in R2-072212:	25.331 Rel-7	Ericsson	Mr. Janne Peisa
 R2-072212 Introduction of Improved L2 support for high data rates The document was presented by Sven Ekemark from Ericsson. Discussion: RB mapping decision will be incorporated here, together with some wording imporvement. MACd flow CR is not needed anymore because of this. Decision: The CR was revised in R2-072259, CR3025: 	CR	25.331 Rel-7	Ericsson
 R2-072259 Introduction of Improved L2 support for high data rates The document was presented by Sven Ekemark from Ericsson. Discussion: UE behaviour not specified will be added for one case. Subclause 8.6.6.27, indentation 1: one "else" may be missing. Decision: The CR was agreed in R2-072307 (CR 3025rev1). 	CR 3025	25.331 Rel-7	Ericsson
R2-072260 Introduction of Improved L2 support for high data rates The document was presented by Janne Peisa from Ericsson. Discussion: Decision: The CR was agreed as it was.	CR 0309 1	25.322 Rel-7	Ericsson Mr. Janne Peisa
R2-071746 MAC-ehs header open issues The document was presented by Mr. Zhongda Du from ZTE. Discussion:		ZTE	Mr. Zhongda Du

Decision: Agreement on how to indicate the end of the header. Other issues were not agreed.

R2-071619 The documer Discussion:	Reconfiguration of L2 protocols between enhanced and non-enhanced cells at was presented by Paul Marinier from InterDigital.			InterDigital	Mr. Stephen Terry
Decision: Th	e proposal 2 was agreed. Ericsson RRC CR will incorporate this.				
R2-071646 The documer Discussion: Rel-5 solution	L2 processing nt was presented by <u>Juho Pirskanen from Nokia Siemens Networks</u> Paul Ma n was mentionned but backward compatibility would have to be extremely	rinier well :	from InterDigita	4 .	Nokia <u>, Nokia Siemens</u> <u>Networks</u>
Agreement to) limit the number of aueues scheduled per TTI to three.				
We will com	e-back on this.				
R2-071618 The documer Discussion: Decision: Th	Window based polling with flexible RLC PDU size at was presented by Paul Marinier from InterDigital. the document was noted.				InterDigital
R2-072021 The documer Discussion:	L2 Improvements and polling nt was presented by Etienne Chaponniere from Flarion Technologies.			Qualcomm Europe	Mr. Etienne Chaponnière
Decision: Th	e document was noted. This mechanism of downlink flexible PDU size cas	e wil	l be adde to the E	Ericsson CR on the su	bject.
R2-072111 MACd flows	Correction to the maximum number of Mac-d flows on HSDPA. seems not needed. The CR was noted without presentation. However, co-or	dinat	CF ion with the Iub	R 25.331 Rel-7 solution is needed.	Alcatel-Lucent
5.6 0	CPC				
R2-071644 R2-071772 R2-071881 R2-071882 R2-071985	Correction to CPC UL DTX for addition of a new cell in the active set. CPC parameter ranges L1 parameter name changes L1 parameter name changes Alignment of CPC UL DRX TTI due to Compressed Mode	CR CR CR	25.331 Rel-7 25.308 Rel-7 25.321 Rel-7	Alcatel-Lucent Qualcomm Europe Ericsson Ericsson INFINEON	Mr. Janne Peisa Mr. Janne Peisa
R2-072057	Avoid unnecessarily decreasing UE DRX possibility	CR	25.321 Rel-7	Nokia, Nokia Siemens Networks	Mr. Juho Pirskanen

R2-072130 The documer	HS-SCCH Less and Rate Matching 1 nts were noted without presentation.		CR 25.3	31 Rel-7	Qualcomm	Europe	Mr. Etienne Chaponnière
5.7 N	MIMO						
R2-072107 The LS was j	(R1-071238, to RAN2). LS on 64QAM HSDPA and HSDPA MIMO UE postponed for the next meeting.	cateç	gories LS	RAN WG1	Qualco	mm	
<u>R2-071986</u>	HSPA+ L2 Buffering Calculations			Ne SI Ni	okia, NOKIA IEMENS ETWORKS		Mr. Simone Provvedi
R2-071884 R2-072017 R2-072018 R2-072026 R2-072079 R2-071643 R2-071784 R2-071885 R2-071888	Restriction on the number of MIMO processes Buffering requirement for joint HS-DSCH E-DCH categories Correction of MIMO and 64QAM buffering requirement Clarification on assigning HARQ process IDs for MIMO Clarification on HARQ process allocation for MIMO Correction on 64QAM and MIMO UE capability in RRC Open items with release 7 UE categories Definition for higher bit rate bearers due to 64QAM and MIMO Introduction of HS-DSCH category for combined MIMO and DL64QAM	CR CR CR CR CR CR	25.331 Rel-7 25.306 Rel-7 25.306 Rel-7 25.331 Rel-7 25.331 Rel-7 25.331 Rel-7 25.331 Rel-7	Ericsson, Qualcom ASUSTe ASUSTe Alcatel-L Ericsson, Qualcom Ericsson, Lucent	, Philips m Europe K K ucent, , Nokia m Europe , Alcatel-	Mr. Janne Mr. Etienr Mr. Etienr Mr. Janne Mr. Janne	e Peisa ne Chaponnière ne Chaponnière e Peisa e Peisa
R2-072056 The documer Discussion: Common und Decision: Co	Removing MIMO requirements from MAC-hs nt was presented by Juho Pirskanen from Nokia. derstanding is that MIMO is not supported by MAC-hs. ommon understanding is that MIMO is not supported by MAC-hs.		CR	25.321 Re	əl-7	Nokia S Networl	iemens ks, Nokia

5.8 16 QAM UL

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R2-071621 Starting and stopping operation in 16QAM mode

InterDigital

Mr. Stephen Terry

Draft1 minutes of the 58th TSG-RAN WG2 meeting					
R2-072145 Correction on 16QAM category	CR	25.33	1 Rel-7	Alcate	el-Lucent
R2-071761 DRAFT CR to TS 25.331 [Rel-7] on Introducing 16QAM uplink support The document was revised before presentation in R2-072182:	CR	(QUALCOM	M Europe	Dr. Nathan Tenny
R2-072182 DRAFT CR to TS 25.331 [Rel-7] on Introducing 16QAM uplink support The document was presented by Etienne Chaponniere from Flarion Technologies. Discussion: Decision: The CR was revised in R2-072284 (CR 2982rev5):	CR	2982	4		QUALCOMM Europe
R2-072284 Introducing 16QAM uplink supportThe document was presented by Nathan Tenny from Qualcomm.Discussion:Indentation in the tabular needs to be corrected.Decison: The CR was agreed in R2-072304 (CR 2982rev6).	CR	2982	5		QUALCOMM Europe
R2-072285 Introducing 16QAM uplink support The document was presented by Nathan Tenny from Qualcomm. Discussion: Decison: The CR was agreed as it was.	CR	0311	2 25.32	21 Rel-7	QUALCOMM Europe
R2-072289 Introducing 16QAM uplink support The document was presented by Nathan Tenny from Qualcomm. Discussion: Decison: The CR was agreed as it was.	CR	0151	2 25.30)6 Rel-7	QUALCOMM Europe
5.9 64 QAM DL					
R2-071699 Transport block tables for 64QAM	CR 25.	.321	Nokia Sie Networks	mens Nokia	Mr. Juho Pirskanen

5.10 MBMS FDD Physical layer Enhancements

R2-071688MBMS in MBSFN mode for FDDR2-071890Introduction of TDM scheme for MBSFN

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LG Electronics Inc.

Ericsson

Mr. Patrick Fischer

Mr. Janne Peisa

R2-071688 MBMS in MBSFN mode for FDD LG Electronics Inc. Mr. Patrick Fischer The document was presented by Derek Richards from IPWireless and Patrick Fischer from LG Electronics. Discussion: Decision: The document was noted. 0027 3 LG Eletcronics Inc., IP CR R2-071670 MBMS FDD and TDD Physical Layer Improvements 25.346 Rel-7 Wireless., IPMobile, UTStarcom Mr. Patrick Fischer The document was presented by Patrick Fischer from LG Electronics. **Discussion:** Decision: The CR was revised in R2-072313 (CR 0027rev4): LG Eletcronics Inc., IP Wireless., R2-072313 MBMS FDD and TDD Physical Laver Improvements CR 0027 4 25.346 Rel-7 IPMobile. UTStarcom The document was presented by Patrick Fischer from LG Electronics. Discussion: Decision: The CR was agreed as it was. LG Eletcronics Inc., IP R2-071672 MBMS FDD and TDD Physical Layer Improvements CR 25.304 Rel-7 Wireless., IPMobile, UTStarcom Mr. Patrick Fischer The document was presented by Derek Richards from IPWireless and Patrick Fischer from LG Electronics. **Discussion:** Is the Periodic search for MBMS cluster a necessary requirement ? (this could be power consuming). The sentence will be rephrased to remove the periodic requirement and add a condition on the configuration. The UE needs to be aware that the particular service is provided via MBSFN mode.

Subclause 6.3.1.3: The "same technology" will be removed. The "periodic" will be removed.

Different phrasings were discussed. Another solutoin would be "The UE shall attempt to determine which services are available", or "The UE should determine which services are available".

Subclause 6.3.1.2: Mention to the MICH is missing. Reference to 25.331 will be used.

Subclause 4.3 and e.g. Subclause 5.3.1.1: Barred cells are not operating on MBSFN mode. Sentence on MBSFN indicated as barred may be removed. A new subclause 5.3a with the new requirements will be used instead.

Decision: An LS will be sent to RAN1 to inform about the need of the servive announcement, in R2-072179 (LG Electronics). The CR was revised in R2-072180:

R2-072180 MBMS FDD and TDD Physical Layer Improvements

CR

25.304 Rel-7 LG Eletcronics Inc., IP Wireless.,

Draft1 minutes of the 58th TSG-RAN WG2 meeting					IDM	obilo UTStoroom	
The document was presented by Patrick Fischer from LG Electronics. Discussion: Subclause 6.3.1.3, first paragraph: typo.					IPM	oblie, OTStarcom	
Decision: The CR will be merged with the LCR TDD CR on the subject. In in R2-	0722	63, CR	015	9.			
R2-072263 MBMS FDD and TDD Physical Layer Improvements The document was presented by Patrick Fischer from LG Electronics. Discussion: Decision: The CR was agreed as it was.			CR	0159	25.304 Rel-7	LG Eletci 7 IPMobile	onics Inc., IP Wireless., UTStarcom
R2-071671 MBMS FDD and TDD Physical Layer Improvements The document was presented by Patrick Fischer from LG Electronics. Discussion: Headlines for part C - MBMS/MBSFN inconsistency. MBSFN Capability part C at Values from R2-071688 will be incorporated in the part C (FDD). Decision: The CR was revised in R2-072181:	CR and pa	25.300 urt D sh	6 Rel	-7 l be us	LG Eletcronics Wireless., IPMo sed instead.	Inc., IP obile, UTStarcom	Mr. Patrick Fischer
R2-072181 MBMS FDD and TDD Physical Layer Improvements The document was presented by Patrick Fischer from LG Electronics. Discussion: Decision: The CR will be merged with the LCR TDD CR, in R2-072264. CR 0159	9:	CR		2	5.306 Rel-7	LG Eletcronics Ir IPMobile, UTSta	nc., IP Wireless., rcom
R2-072264 MBMS FDD and TDD Physical Layer Improvements The document was presented by Patrick Fischer from LG Electronics. Discussion: New RAN1 slot formats have been updated here. Decision: The CR was agreed as it was.			CR	0159	25.306 Rel-7	LG Eletci 7 IPMobile;	onics Inc., IP Wireless., UTStarcom
R2-071669 MBMS FDD and TDD Physical Layer Improvements The document was presented by Patrick Fischer from LG Electronics. Discussion:	CR	25.331	l Rel	-7	LG Eletcronics Wireless., IPMo	Inc., IP bbile, UTStarcom	Mr. Patrick Fischer

Information structure in the tabular uses the SIB11 (MBSFN frequency list used in the unicast cells to indicate frequencies). However, the MBSFN cluster relies on the measurement control SI in the SIB11 for the interfrequency cells. This results in redundant information (see 10.3.7). An alternative would be to have the same IE in SIB11 (MBSFN frequency list for unicast service) and MBSFN cluster to list the alternative frequencies.

Answer that this would be an optimisation for the downlink only case.

For the TDD mixed carrier case, SIB11 interfrequency cell info list contains information for unicast interfrequency cell reselection.

Midamble shift IE was changed with regards to 10.3.6.41 Burst type. However, this IE is referenced by reconfiguration procedures. The tabular should make this clear (i.e. "conditional" on the message type).

Inter frequency neighbour list, subclause 10.3.7.x (new). Indexes point to the interfrequency cell list in SIB11. The index range is restricted to four, whereas higher indexes of frequencies may be expected.

ASN.1: downlink timeslot code R7 is not referenced anywhere else.

Subclause 8.6.9.11, procedure description: second bullet needs to be aligned with the proposal.

Subclause 13.4.11c: The Note is misleading. There is one instance of the variable in the UE. If there are two set of information with the same name, at least this should be stated clearly (or use two different names).

Decision: The document was noted. The CR was revised in R2-072195:

R2-072195 MBMS FDD and TDD Physical Layer Improvements The document was presented by Patrick Fischer from LG Electronics. Discussion: Decision: The CR will be merged in the related CR on LCR TDD, in R2-0	CR 072265,	CR	25.331 . 3026:	l, Rel-7	LG Eletci Wireless	ronics Inc., IP , IPMobile, UTStarcom	Mr. Patrick Fischer
R2-072265 MBMS FDD and TDD Physical Layer Improvements The document was presented by Patrick Fischer from LG Electronics. Discussion: Decision: The CR was agreed as it was. There is an LS to SA4 on this topic, in R2-072179.	C	CR	3026	25.33 [.]	1 Rel-7	LG Eletcronics Inc., IP V IPMobile, UTStarcom	Vireless.,
5.11 MBMS TDD Physical layer Enhancements R2-071663 Support for Burst Type 5 in 3.84/7.68 Mcps TDD MBSFN only cel The document was withdrawn before presentation.	ls				IP	Wireless	

R2-071891 Support for DL only SFN operation for MBMS FDD The document was presented by (...) and Sven Ekemark from Ericsson. **Discussion:**

What is the WI (/mode) associated with this document ?

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Ericsson

Mr. Janne Peisa

Decision: The document was noted.

R2-071892 Support for DL only SFN operation for MBMS FDD CR 25.346 Rel-7 Ericsson Mr. Janne Peisa (The document was revised before presentation in R2-072175, but R2-071892 was presented). The document was presented by Sven Ekemark from Ericsson. **Discussion:** The solutions chosen were challenged. The proposed text is not required. It was commented that this could be introduced in a much cleaner way by assigning a new band for FDD. No other technical comments were received. Decision: The document was noted. A revision was made available later in R2-072319. R2-072319 Support for DL only SFN operation for MBMS FDD CR 25.346 Rel-7 Ericsson R2-071893 Support for DL only SFN operation for MBMS FDD CR 25.331 Rel-7 Ericsson Mr. Janne Peisa The document was revised before presentation in R2-072176: R2-072176 Support for DL only SFN operation for MBMS FDD CR 25.331 Rel-7 Ericsson The document was presented by Sven Ekemark from Ericsson. **Discussion:** As for the previsou document, it was commented that this could be introduced in a much cleaner way by assigning a new band for FDD. No other technical comments wre received. Decision: The document was noted. A revision was made available later in R2-072320. R2-072320 Support for DL only SFN operation for MBMS FDD 25.331 Rel-7 CR Fricsson R2-072177 Support for DL only SFN operation for MBMS FDD CR 25.306 Rel-7 Ericsson The document was presented by Sven Ekemark from Ericsson. **Discussion:** It was commented that this is a new document that was not available prior to the meeting.

Decision: The document was noted.

A revision was made available later in R2-072321:

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R2-072321 Support for DL only SFN operation for MBMS FDD	CR	25.306 Rel-7	Ericsson
R2-071890 Introduction of TDM scheme for MBSFN		Ericsson	Mr. Janne Peisa
The document was presented by Hakan Palm from Ericsson.			
Discussion:			
MHCH should be MCCH.			
One line in the calculation of the formula should be deleted.			
This could be extended to the TDD mode.			
This is not connected to a physical layer improvement.			
One range could be extended.			
Should the list be extended at the end of the current list, or create a separate list?			
MSCH is aimed at low data rate services intermittent in the sending of data, whereas this	is aimed at high	data rate services with	amount of data to send at
each repetition.			

Part of the general MBMS improvement for the Rel-7, or not ? Open. **Decision:** The document was noted. This will be introduced in the main 25.331 CR.

5.12 MBMS LCR TDD Physical layer Enhancements

 R2-071797 Overview of MBMS LCR TDD Physical Layer Enhancements The document was presented by Mr.Xuelong Wang from CATT. Discussion: JIB3, 5 and 11 are enhanced. Decision: The document was noted. 		Tech, ZTE, Communica	Spreadtrum tions Mrs. I	Haiyang Quan
R2-071750 MBMS LCR TDD Physical Layer Enhancements The document was revised before presentation in R2-071802:	CR	25.436 Rel-7	RITT, CMCC, CATT Communications	「, TD Tech, Spreadtrum
R2-071802 Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25.346 The document was presented by Mr.Xuelong Wang from CATT.	CR	25.346 Rel-7	RITT, CMCC, CATT Tech, ZTE, Spreadtu Communications	ſ, TD- rum Mrs. Haiyang Quan

RITT, CMCC, CATT, TD-

Discussion:					
Subclause 7.1a, now applicable to LCR TDD ? Also, there is a typo: "different frequen	cies b	ру".			
Decision: The CR was revised in R2-072198:					
R2-072198 Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25.346 The document was presented by Patrick Fischer from LG Electronics. Changes were merged into R2-072313 before presentation.		CR	25.346 Rel-7	RITT, CMC0 ZTE, Spread Communica	C, CATT, TD-Tech, dtrum tions
R2-071812 Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25.304 The document was presented by Mr.Xuelong Wang from CATT. Discussion: MBMS/MBSFN inconsistency. Text needs to be modified as in R2-072198. Decision: The CR was revised in R2-072199:	CR	25.304 Rel-7	RITT, CMCC, Tech, ZTE, Sj Communicatio	CATT, TD- preadtrum pns	Mrs. Haiyang Quan
Decision. The OK was revised in R2-0/21/).					
R2-072199 Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25.304 Changes were merged into R2-072263 before presentation.		CR 2	25.304 Rel-7	RITT, CMCC ZTE, Spread	, CATT, TD-Tech, trum Communications
R2-071807 UE Capabilities for LCR TDD MBSFN The document was presented by Mr.Xuelong Wang from CATT. Discussion: Decision: The document was noted.				RITT, CM Tech, ZTE Communi	ICC, CATT, TD- E, Spreadtrum cations
R2-071809 Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25.306 The document was presented by Mr.Xuelong Wang from CATT. Discussion: Decision: The content was agreed. Will be merged with the revised FDD / HCR TDD 5	CR 25.30	25.306 Rel-7 6 CR.	RITT, CMCC, Tech, ZTE, S Communicatio	CATT, TD- preadtrum pns	Mrs. Haiyang Quan
	05	05 004 D - 1 7		OATT TO	Mar Heimer C
R2-0/1816 Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25.331	CR	25.331 Rel-7	RILL, CMCC,	CALL, ID-	Mrs. Haiyang Quan

Draft1 minutes of the 58th TSG-RAN WG2 meeting Tech, ZTE, Spreadtrum Communications The document was presented by Mr.Xuelong Wang from CATT. **Discussion:** Neighbour Cell info. modification needed. Alignment of the MBMS/MBSFN needed. There is no ASN.1 yet. Decision: The CR was revised in R2-072200: RITT, CMCC, CATT, TD-Tech, ZTE, Spreadtrum Communications R2-072200 Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25.331 CR 25.331 Rel-7 Changes were merged into R2-072265 before presentation. 1.28Mcps TDD MBMS physical layer improvements: Addition of DL SF2 and draft CR to R2-072032 CR 25.331 Rel-7 25.331 v7.4.0 The document was revised before presentation in R2-072166: 1.28Mcps TDD MBMS physical layer improvements: Addition of DL SF2 and draft R2-072166 CR to 25.331 v7.4.0 CR 25.331 Rel-7 The document was presented by Mr.Xuelong Wang from CATT. **Discussion:** Decision: The content was agreed. Will be merged with the revised FDD / HCR TDD 25.331 CR. R2-071798 Introduction of scenarios of 1.28Mcps TDD for TR25.905 The document was presented by Mr.Xuelong Wang from CATT. **Discussion:** Decision: The content was agreed. Will be merged in the TR.

R2-071799 Introduce MBMS LCR TDD Physical Layer Enhancement to TR 25.905	CR	25.905 Rel-7	RITT, CMCC, CATT, TD- Tech, ZTE, Spreadtrum Communications
The document was presented by Mr.Xuelong Wang from CATT.			
Discussion:			
The content was agreed by RAN WG1.			
The CRs are independent (i.e. do not overlap)			

Decision: The CR was revised in R2-072201, CR0002:

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TD Tech Ltd.

TD Tech Ltd.

RITT, CMCC, CATT, TD-Tech, ZTE, Spreadtrum

Communications

R2-072201 Introduce MBMS LCR TDD Physical Layer Enhancement to TR 25.905 The CR was agreed following off-line discussions (no changes compared to the previous	usversi	CR ion).	0002	25.90	5 Rel-7	RITT ZTE,	, CMCC, CATT, TD-Tech Spreadtrum Communica	, tions
 R2-072031 CR to 25.905 V7.0.0 for supporting LCR TDD MBSFN operation Was already seen at RAN2-57bis. The document was presented by Mr.Xuelong Wang from CATT. Discussion: Decision: The CR was agreed as it was. 			CR	0001 2	25.905 Re	el-7	TD Tech Ltd.	
R2-072213 Chip Combining The document was presented by () from ZTE. Discussion: Decision: The content was agreed and will be merged in the CR from LG Electronics.		CR		25.33 [.]	1 Rel-7	R Z	RTT, CMCC, CATT, TD-T TE, Spreadtrum Commun	ech, lications
5.13 GNSS in UTRAN								
R2-071612 A-GNSS in UTRAN (RRC) The document was revised before presentation in R2-072138:	CR	25.33	1 Rel-7		Orange,	Alcate	el-Lucent, Nokia	
R2-072138 A-GNSS in UTRAN (RRC) The document was revised before presentation in R2-072225:		CR	25.331	Rel-7	Orang	ge, Alca	atel-Lucent, Nokia	
R2-072225 A-GNSS in UTRAN (RRC) The document was presented by Alain Abinakhoul from Orange. Discussion:	CR	22	25.3	331 Rel-7	Oi	range,	Alcatel-Lucent, Nokia	
Decision: The CR will be <i>agreed by email</i> , until Friday 18 th May 2007. In R2-0/2286,	CR 30	<i>)32</i> .						
R2-071614 GANSS support to UE capabilities The document was revised before presentation in R2-072155:	CR	25. 30	06 Rel-7		Orange,	Alcate	el-Lucent, Nokia	
R2-072155 GANSS support to UE capabilities 82		CR		25. 30	6 Rel-7	C	Drange, Alcatel-Lucent, No	okia

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The document was presented by Alain Abinakhoul from Orange. Discussion:			
Decision: The CR was agreed in R2-072287, CR 0160.			
5.14 1.28 Mcps TDD Enhanced Uplink			
R2-071791 Clarification for control of E-RUCCH transmission in LCR TDD The document was presented by Mr. Zhongda Du from ZTE.	CR 25.321 F	Rel-7 ZTE, CA	TT, TD TECH
Decision: Decision: The CR was agreed in R2-072293, CR 0321.			
R2-071845 Addition of E-DCH Scheduling Information Power Offset in TDD mode The document was presented by () from ZTE.	CR	25.331 Rel-7	ZTE, CATT
What is the exact applicability to HCR TDD ? With this CR, it is applicantle to it.			
Why was the new Rel-7 info list not created ?			
Decision: The CR was agreed in R2-072294, CR 3034.			
R2-071858 Corrections to tabular for non-scheduled transmission for LCR TDD Decision: The CP was agreed in R2-072295 CP 3035 Then revised again in R2-072343 ((CR 25.331 Rel-7	CATT, TD-Tech,	ZTE Mrs. Haiyang Quan
Same content. Agreed.			mismaten of documents.
R2-071860 Some Small Editorial Corrections to TS 25.321	CR 25.321 Rel-7	CATT	Mrs. Haiyang Quan
Decision: The CR was agreed in R2-0/2296, CR 0322.			
R2-071861 Introduction of PRACH configuration in protocol messages triggering E-DCH servi change in LCR TDD system	ng cell CR	25.331 Rel-7	ZTE, CATT
Decision: The CR was agreed in R2-072297, CR 3036.			
R2-071863 Some clarifications related to E-DCH Scheduling Information in TDD mode Decision: The CR was agreed in R2-072298, CR 0324.	CR	25.321 Rel-7	ZTE, CATT

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R2-071867 Correction to definition of maxNumE-AGCH for TDD This is only affecting the Rel-7 syntax. The CR was agreed in R2-072300, CR3037.	CR	25.33 ⁻	1 Rel-7	CATT, IPWireles	S	Mrs. Haiyang Quan
R2-071794 Introduction of E-TFC Selection for 1.28Mcps TDD The document was revised before presentation in R2-072226:			CR 2	5.321 Rel-7	ZTE, C	ATT, TD TECH
R2-072226 Introduction of E-TFC Selection for 1.28Mcps TDD The CR was agreed in R2-072301, CR0323.	CF	2	25.3	21 Rel-7 ZTE	E, CATT, ⁻	TD TECH
5.15 Study Item on Scope of future FDD HSPA Evolution						
R2-071698SRNS relocation for carrier sharing between PS only RNS and PS and CS RNSR2-072099Evolved HSPA: UE Involved Relocation				Nokia Siemens Vodafone Grou	Networks p	Mr. Juho Pirskanen
5.16 TEI7						
R2-072100 (G2-070094, to RAN2). LS on Removal of limitation of SRNC identity (S2-072266, Cc RAN2). Reply LS (to RP-071677) on the Removal of limitation of	I	LS	GERAN2	Alcatel-Lucer	nt	
R2-072129 SRNC identity The LSs were presented by Stanislas Bourdeaut from Alcatel-Lucent. Discussion:	l	LS	SA WG2	Alcatel-Lucer	nt	
Decision: The LSs were noted.						
 R2-071641 Configuration of RACH measurements results in SIB12 (Earlier CR was agreed in principle at RAN2-57bis). The document was presented by Stanisal Bourdeaut from Alcatel-Lucent. Discussion: Decision: This CR is already taken in acount in another CR, hence the CR was withdrawn. 		CR	0020	25.308 Rel-7	Alc	atel-Lucent
R2-072069 Use of Integrity protection algorithm UIA/2: removal of a 'shall' in a note		CR	2992	25.331 Rel-7	ET	SIMCC

(CR was agreed in principle at RAN2-57bis). The CR was agreed as it was.

R2-071639 PDCP reinitialisation at SRNS relocation (CR was agreed in principle at RAN2-57bis). The document was presented by Stanisal Bourdeaut from Alcatel-Lucent. The CR was agreed as it was.		CR	0302	25.323 Rel-7	Alcatel-Lucent
R2-071632 RRC Cellid encoding alignment on RANAP (CR was agreed in principle at RAN2-57bis). The document was presented by Stanisal Bourdeaut from Alcatel-Lucent. This CR ensures the consistency. The CR was agreed as it was.	CR 2993	25.33	1 Rel-7	Alcatel-Lucent	
R2-071680 Signalling connection release at T314/315 expiry (CR was agreed in principle at RAN2-57bis). The document was presented by Jean Aicard Fabian from Motorola. Discussion: Decision: The CR was agreed as it was.		CR	2994	25.331 Rel-7	Motorola
R2-071682 Cell Update Confirm with RLC re-establish indicator (CR was agreed in principle at RAN2-57bis). The document was presented by Jean Aicard Fabian from Motorola. Discussion: The UE is not affected. Decision: The CR was agreed as it was.		CR	2995	25.331 Rel-7	Motorola
R2-071898 Correction of STTD Indicator for F-DPCH Tx Diversity (CR was agreed in principle at RAN2-57bis). The document was presented by Sven Ekemark from Ericsson.		CR	2996	25.331 Rel-7	Ericsson

Decision: The CR was agreed as it was.

R2-071899 Introduction of GAN PS handover R2-071900 Introduction of GAN PS handover (CRs were agreed in principle at RAN2-57bis). The document was presented by Sven Ekemark from Ericsson. Discussion: Decision: The CR was agreed as it was.		CR CR	0256 2997	25.306 Rel-7 25.331 Rel-7	Ericsson Ericsson	Mr. Janne Peisa Mr. Janne Peisa
R2-071868 Feature Clean Up leftover: Removal of DRAC leftover (CR was agreed in principle at RAN2-57bis). The document was presented by Markus Wimmer from Nokia Siemens Netw Discussion: Decision: The CR was agreed as it was.	CR vorks.	2998	25.331 Rel-7	Nokia Siemens N	letworks	
R2-071862 S-CCPCH and PCH channel selection for Band IV or Band IX or Ban (CR was agreed in principle at RAN2-57bis). The document was presented by Markus Wimmer from Nokia Siemens Netw Discussion: Decision: The CR was agreed as it was.	nd X vorks.	CR	0157 25.304	Rel-7 Nokia S	iemens Networ	ks
R2-071866 Initialisation of CFN calculation for CELL_FACH CF (CR was agreed in principle at RAN2-57bis). CF The document was presented by Markus Wimmer from Nokia Siemens Netwer Discussion: Decision: The CR was agreed as it was.	₹ 299 vorks.	99 29	5.331 Rel-7	Nokia Siemens Netw	vorks	
R2-071933 PLMN selection ping-pong control (CR was agreed in principle at RAN2-57bis). The document was presented by Simone Provvedi from Nokia Siemens Netw Discussion: Decision: The CR was agreed as it was.	CR vorks.	3000	25.331 Rel-7	Nokia, 3, Ericsson, I NOKIA SIEMENS N	Votorola, ETWORKS I	Mr. Simone Provvedi
R2-071934 PLMN selection ping-pong control (CR was agreed in principle at RAN2-57bis).	CR 86	0158	25.304 Rel-7	Nokia, 3, Ericsson, I NOKIA SIEMENS N	Motorola, ETWORKS I	Mr. Simone Provvedi

Discussion: Decision: The CR was agreed as it was. Optimization of switching between MBMS broadcast TV channels 3001 R2-072042 transmitted on ptp bearers (MBMS for Mobile TV) CR 25.331 Rel-7 NEC, Ericsson Mr. David Lecompte (CR was agreed in principle at RAN2-57bis). The document was presented by David Lecompte from NEC. **Discussion: Decision:** The CR was agreed as it was. CR 3002 R2-071638 Alignment of tabular to ASN.1 for SIB11/SIB12 and event 1J NEC 25.331 Rel-7 Mr. David Lecompte (CR was agreed in principle at RAN2-57bis). The document was presented by David Lecompte from NEC. **Discussion:** Decision: The CR was agreed as it was. R2-071640 Correction of Out of Sequence Reception function CR 0307 25.322 Rel-7 NEC Mr. David Lecompte (CR was agreed in principle at RAN2-57bis). The document was presented by David Lecompte from NEC. **Discussion:** Decision: The CR was agreed as it was. CR0308 to LG Electronics Inc., R2-071760 CR0308 to 25.322 DAR over CCCH SAMSUNG CR 25.322 (CR was agreed in principle at RAN2-57bis). The document was presented by Mr. SungDuck Chun from LG Electronics. **Discussion:** Decision: The CR was agreed as it was. Ericsson, LG Electronics, R2-072202 Removing an incomplete optimization for RLC operations during HSDPA cell change CR 0306 25.322 Rel-7 Samsung

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The document was presented by Simone Provvedi from Nokia Siemens Networks.

R2-072203 Removing an incomplete optimization for RLC operations during HSDPA cell change	CR		25.321 Rel-7	Ericsson, LG Electronics, Samsung Ericsson, LG
R2-072204 Removing an incomplete optimization for RLC operations during HSDPA cell change (The 25.306 CR was already agreed in principle at RAN2-57bis). The documents were presented by from ASUStek.	CR		25.308 Rel-7	Electronics, Samsung
Decision: R2-072202 was revised in R2-072275 (CR 0306rev1) to correct the coversheet and add the se R2-072203 was agreed in R2-072276. CR 0319. R2-072204 was agreed in R2-072277. CR 0022.	ntenc	e on e	arlier implementabili	ty.
R2-072275 Removing an incomplete optimization for RLC operations during HSDPA cell change The CR was considered agreed.	CR	306	1 25.322 Rel-7	ASUStek
R2-072029 Initiation of state variable VR(UDH) and VR(UDR) The document was presented by Sam Jiang from ASUSTek. Discussion: Decision: Rel-6 CR not needed/not agreed. A potential Rel-7 solution may be discussed later.			CR 25.322 Rel-6	ASUSTeK
R2-072266 Corrections on modulus base in UM in RLC R2-072267 Corrections on modulus base in UM in RLC The CR was agreed as it was.	CR CR	0310 0311	25.322 Rel-6 25.322 Rel-7	ASUSTeK ASUSTeK
 R2-071611 Additional DCH RAB Combinations The document was presented by Thomas Stadler from Nokia Siemens Networks. Discussion: The double combination is a typical RAB combination. Decision: The CR was technically endorsed in R2-072269, CR 0095. R2-071616 is the draft LS. 		CR	25.993 Rel-7	Nokia Siemens Networks, T- Mobile
R2-071613 HSPA RAB Combinations The CR was agreed in R2-072270, CR 0096.		CR	25.993 Rel-7	Nokia Siemens Networks, T- Mobile

R2-071615 Additional HSPA RAB Combinations The CR was agreed in R2-072271, CR 0097.		CR	25.993 Rel-7	Nokia Sie	emens Networks
R2-071790 T305 timer in RRC container at SRNS relocation The CR will be <i>agreed by email</i> in R2-072282, CR 3030.		CR	25.331 Rel-7	huawei	
R2-072086 MRW Procedure for Special HE Value Configuration Withdrawn as merged into R2-072163.	CR	25.322 Rel-7	ASUSTeK		Mr. Sam Jiang
R2-071697 Introduction of Wait time to Cell Update Confirm The document was presented by Juho Pirskanen from Nokia Siemens Networks. Discussion: Decision: The CR was agreed in R2-072278, CR 3027.	CR	25.331	Nokia Siemens N Nokia	letworks,	Mr. Juho Pirskanen
R2-071696 Removing the limitation of SRNC identity size The document was revised before presentation in R2-072240:	CR	25.331	Nokia Siemens N	letworks	Mr. Juho Pirskanen
R2-072240 Removing the limitation of SRNC identity sizeThe document was presented by Juho Pirskanen from Nokia Siemens Networks.Discussion:The UE does not need to know the RNC ID but considers the U-RNTI.Decision: The CR was agreed in R2-072279, CR 3028.		CR	25.331 Rel-7	Nokia S	siemens Networks
R2-072020 Introduction of enhanced F-DPCH The IE will be optional. The CR was agreed in R2-072283, CR 3031.		CR	25.331 Rel-7	Qualcom	m Europe
R2-071767 HSPA VoIP Service Continuity in Rel-7 The document was revised before presentation in R2-072229:			QUALCOMM Eu	rope	Dr. Nathan Tenny
R2-072229 HSPA VoIP Service Continuity in Rel-7 The document was presented by Dino Flore from Qualcomm. Discussion: This may be discussed at the plenary. Decision: The document was noted.				QUALCO	DMM Europe

R2-071654 SAS-Centric A-GPS - UE requesting additional assistance data The document was withdrawn before presentation.		CR 2	25.305 Rel-7	Andrew Co USA	prporation, T-Mobile
R2-071764 Proposed CR to TS 25.331 [Rel-7] on Change of UE capability The document was revised before presentation in R2-072217:	CR		QUALCON	IM Europe, Nokia	Dr. Nathan Tenny
R2-072217 Proposed CR to TS 25.331 [Rel-7] on Change of UE capability The document was noted without presentation. Not agreed.	CR	25.331 Rel-	7 QUALC	OMM Europe, Nokia	Dr. Nathan Tenny
R2-071896 Using special value of HE field to indicate end of an SDU for RLC AM The document was revised before presentation on R2-072163:	CR	25.322 Rel-7	Ericsson, N SIEMENS Samsung	Nokia, NOKIA NETWORKS,	Mr. Janne Peisa
 R2-072163 Using special value of HE field to indicate end of an SDU for RLC AM The document was presented by Janne Peisa from Ericsson. Discussion: Document R2-072086 (ASUSTek) was merged into this document. UM PDU, subclause 11.2.3: Use of the special length indicator/paging. Is it clear ? Decision: The CR was agreed in R2-072280, CR 0312. 		CR	25.322 Re	Ericsson, el-7 NSN, Sar	Nokia, Mr. Janne msung Peisa
R2-071897 Using special value of HE field to indicate end of an SDU for RLC AM The document was revised before presentation on R2-072164:	CR	25.331 Rel-7	Ericsson, N SIEMENS Samsung	Nokia, NOKIA NETWORKS,	Mr. Janne Peisa
R2-072164 Using special value of HE field to indicate end of an SDU for RLC AM The CR will be <i>agreed by email</i> , in R2-072281, CR 3029. Deadline Wednesday 16 th May 2007.	CR	25.331	Rel-7	Ericsson, Nokia, NSN, Samsung	Mr. Janne Peisa
R2-072065 UE capabilities for Rel-7 The document was revised before presentation in R2-072144:				Nokia, NOI NETWOR	KIA SIEMENS KS, Motorola
R2-072144 UE capabilities for Rel-7 90			N	lokia, NOKIA SIEME	INS

NETWORKS, Motorola

R2-072171	Correction on handling MRW procedure failure case		CR		25.3	22 Rel-7	ASUS ⁻	ТеК
R2-071955 R2-071957 R2-071958 R2-071960	UE behaviour unspecified in receiving Transport Format Set Incomplete exception description in UE-based OTDOA Contradictive behaviour in measurement rules for cell re-selection in CELL_ Conflict statements on response to paging when UE has no IMSI	FACH	CR CR I CR CR	25.331 F 25.331 F 25.304 F 25.304 F	Rel-6 Rel-6 Rel-6 Rel-6	Sunplus r Sunplus r Sunplus r Sunplus r	mMobile mMobile mMobile mMobile	Mr. Louis Lu Mr. Louis Lu Mr. Louis Lu Mr. Louis Lu
R2-071954 The documer	Ambiguous description about the reconfiguration scenarios and ciphering nt was withdrawn before presentation.	of TM	1 RBs		CR	25.331 Re	9 - 6	Sunplus mMobile
R2-071668 The CR was	Correction to definition of Power Resource Related Information (TDD only agreed in R2-072302, CR 3038.	')		CR 25	5.331 R	el-7	IPWirele	ess, CATT
R2-071666 R2-071667 R2-071710 R2-071711	Correction to ASN.1 (7.68 Mcps TDD only) Correction to Tabular (alignment with ASN.1) Principally agreed CR on removing an inperfect optimization on RLC operation during HO The need for VoIP rate cotnrol	CR CR	25.331 F 25.331 F	Rel-7 Rel-7	IPWin IPWin Ericss sams	eless eless son, Samsul ung	ng	
R2-071764 R2-071790	Proposed CR to TS 25.331 [Rel-7] on Change of UE capability T305 timer in RRC container at SRNS relocation	CR CR	25.331 F	Rel-7	QUAL huaw LG El	COMM Eur ei ectronics In	rope, Nokia c.,	Dr. Nathan Tenny
R2-071792 R2-071793	Discussion on RLC Control Information Delivery Proposed CR to 25.322 Correction to Control Information transmission with two logical channels	CR	25.322 ii to R2-07 25.322 ii	n relation 1792 n relation	SAMS LG EI SAMS LG EI	SUNG ectronics In SUNG ectronics In	с., с.,	
R2-071795	Proposed CR to 25.322 Removal of two channel configurations in RLC	CR	to R2-07	1792	SAMS	SUNG		
R2-071894	CR implementation issues 25.331 v7.4.0 (2007-03)	CR	25.331 F	kel-7	Ericss	son		Mr. Janne Peisa
R2-071895	Correction of inconsistency in 25.331 related to UE-sending of capabilities.	CR	25.331 F	Rel-7	Ericss	son		Mr. Janne Peisa
R2-071965	Pathioss measurements for cells in the detected set	CR	25.331 F	kei-/				wr. Gordon Young
R2-07 1987	Numeration of Addition of acknowledgement information		25 322 5	2017	∠ I ⊏ Infino	on Tochrold	ogios	Mr. Poland Cruber
R2-072049	Canaral undate of the 25 308	CR	20.022 F	λοι-1 201_7	Nokia	Sigmone N	lotwork	Mr. Juho Pirekapan
112-072030	General update of the 20.000		20.000 F	101-1	INUKIA	Siemens N	CINOIR	WIL JUIN FIISKAITEIT

5.17 Other Rel-7 Study Items

5.18 TEI8 and other Rel-8 WIs

R2-072106	(GP-070517, to RAN2). Reply LS (S1-070300) on Registration in Densely populated area	LS	GERAN	Ericsson
The LS was p	ostponed for the next meeting.			
R2-072114 R2-072127 The documen	(R3-070730, Cc RAN2). Reply LS (to GP-070497) on feasibility of GAN enhancements (S2-072263, Cc RAN2). Reply LS (to GP-070497) on feasibility of GAN enhancements t was presented by Di Viesti Pasquale from Vodafone.		LS LS	RAN WG3 SA WG2
Discussion: Th	e documents were noted. Reply LS to GERAN, Cc SA2 in R2-072215 (T-Mobile).			
R2-071883	A way forward for registration in densely-populated area(RED)		NTT Do	оСоМо

6 Study Item on 3G Home NodeB (LTE & UTRA)

No inputs.

7 Liaisons and outputs to other groups

LTE:

(Denis' minutes):

R2-072134 Reply LS to SA3 on on Verification of security principles Revised in R2-072190:	Qualcomm
R2-072190 Reply LS to SA3 on on Verification of security principles The document was presented by Magnus () from Ericsson. Discussion: Decision: approved with editorial modifications in R2-072191.	Ericsson
92	

R2-072191 Reply LS to SA3 on Verification of security principles Decision: approved.	RAN WG2
R2-072135 Reply LS to RAN3 on LS on LTE MBMS and PDCP The document was presented by XX () from Ericsson. Discussion:	Ericsson
Decision: approved with addition that for PTM-SC case there is PDCP in the eNB.	
R2-072194 Reply LS to RAN3 on LS on LTE MBMS and PDCP The document was presented by XX () from Ericsson. Discussion:	Ericsson
Decision: approved with addition that for F1Wi-5C case there is FDCF in the eNB is the current	wA, to be commined at the next meeting.
R2-072228 LS to RAN1/RAN4 on neighbour cell lists and reading neighbour cell P-BCH Dc The document was presented by Mikio () from DoCoMo. Discussion:	оСоМо
Decision: The LS was approved with revisions: asking if the NCL is "necessary".	
R2-072188 LS to RAN1/RAN4 on neighbour cell lists and reading neighbour cell P-BCH RA Decision: approved. ase there is PDCP in the eNB is the current WA, to be confirmed at the next meeting. RA	AN WG2
R2-072133 Reply LS to SA4 on Rate-Adaptive Real-time Media The document was presented by Axel () from T-Mobile. Discussion:	T-Mobile
Decision: The LS was approved with modifications	
R2-072189 Draft LS on further questions on Rate-Adaptive Real-time Media RA Decision: approved.	AN WG2
R2-072187 DRAFT LS to RAN on latency analysis The document was presented by Magnus () from Ericsson. Discussion: Decision: approved with minor modification	Ericsson
93	

R2-072193 LS to RAN on latency analysis Decision: approved.	RAN WG2
R2 072492 J. C. on Sustem Information Brandoost	Computer
The LS was revised after presentation in R2-072186.	Samsung
R2-072186 LS to RAN1 on System Information Broadcast The LS was approved.	Samsung
R2-072243 Proposed LS to SA2, SA3 on Service Request for LTE/SAE The document was revised after presentation in R2-072310:	Alcatel-Lucent
R2-072310 Proposed LS to SA2, SA3 on Service Request for LTE/SAE The document was presented by Sudeep from Alcatel-Lucent. The LS was approved as it was.	Alcatel-Lucent
R2-072316 LS on user plane handling for LTE (R2-072309 should be included). The LS was presented by () from NEC. Discussion: Decision: The LS was approved in R2-072326 (NEC).	NEC
Other:	
 R2-071616 [DRAFT] LS on Introduction of Additional DCH RAB Combinations into 25.993 The document was presented by Thomas Stadler from Nokia Siemens Networks. Discussion: Decision: The LS was approved in R2-072268 (incuding CR). 	Nokia Siemens Networks
Draft1 minutes of the 58 th TSG-RAN WG2 meeting	
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R2-072173 LS to RAN1 on Quality reporting	LG Electronics
Discussion:	
As a candidate only.	
Cc RAN1, to RAN4.	
Decision: The LS was approved in R2-072318 (LG Electronics). R2-072334 was then allocated follo 'RAN2' (approved version).	wing the meeting in order to update the source to
R2-072156 Reply LS to RAN1 on physical layer aspects of enhanced CELL_FACH in FDD The LS was presented by Stanislas Bourdeaut from Alcatel-Lucent.	Alcatel-Lucent
Discussion:	
Decision: The LS was approved as it was. R2-0/2335 was allocated following the meeting in oder to Approved version.	change the source to 'RAN2' (and remove the 'draft').
R2-072179 LS to RAN1 on MBMS FDD and TDD Physical Layer Improvements The LS was presented by Patrick Fischer from LG Electronics.	LG Electronics
Discussion:	
Decision: The LS was approved in R2-072315 (LG Electronics). R2-072336 was allocated following Approved version.	the meeting in order to update the source to 'RAN2'.
R2-072215 Reply LS to SA2 on feasibility of GAN enhancements	T-Mobile
The document was presented by Harald <u>Schmitt()</u> from T-Mobile.	
Decision: The LS was approved as it was.	
Reply LS to RAN3 on Clarification on two scenarios "Enhanced fromBroadcast over	
R2-0/2242 IUF The LS was presented by Stanislas Bourdeaut from Alcatel Lucent	Alcatel-Lucent
Discussion:	
LS is to RAN1.	
Decision: The LS was approved in R2-072322.	
R2-072291 LS to RAN on Release-7 dependencies	Samsung, Ericsson, Motorola, Nokia, NSN

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Draft1 minutes of the 58th TSG-RAN WG2 meeting The LS was presented by (...) from Samsung. Discussion: Decision: The LS was approved as it was.

See RAN2-58bis.

Email agreement/approvals 8

SubjectRapporteur						
LTE:						
Points 1: LTE Stage 3 Specifications.						
Point 1a - MAC. Text Proposal. Rapporteur. R2-072273 Outline of MAC specification Revised in:						Qualcomm, Ericsson
R2-072345 Outline of MAC specification	_	_	-	_	Qual	lcomm, Ericsson
Point 1b - RRC. Text Proposal. Rapporteur. Point 1c - RLC. Open issue list. Rapporteur. Point 1d - PDCP. Open issue list. Rapporteur.						
R2-072256 Updated PDCP skeleton specification					LO	<u> S Electronics (rapporteur)</u>
Before teleconferences (to be announced).						
Point Te - TS 36.304. Text proposals and discussion documents invited. R2-072311 UE procedures in idle mode for LTE: Text proposal					<u>Nokia, Noki</u>	ia Siemens Networks
Point 2:						
R2-072337 Independence versus coupling of UL/DL bit rate capability in LTE Rapporteur: <u>Masato Kitazoe, QualcommHuawei</u> . By 19 th June 2007. See RAN2-58bis.						<u>HuaweiQualcomm</u>

Point 3:

R2-072338 Update on Mobility, Security, MBMS, Random Access Procedure, etc Rapporteur: Benoist Sebire, Nokia Siemens Networks. By 22 nd May 2007. The CR was agreed over the reflector following the meeting.	CR	0002	36.300 Rel-8	Nokia Siemens Networks
This leaded to another CR:				
R2-072339 Update on MBMS CR That was agreed.	3	<u>36.300</u> <u>Rel-8</u>	Nok	ia Siemens Networks
Non-LTE:				
Point 4:				
R2-072327 R2-072328Clarification on E-DCH Scheduled Grant Payload Calculation Clarification on E-DCH Scheduled Grant Payload Calculation Rapporteur: Rapporteur: Enrik Enbuske, Ericsson. By Thursday 17th May 2007. The CRs were agreed over the reflector following the meeting.	CR CR	0325 0326	25.321 Rel-6 25.321 Rel-7	Ericsson Ericsson
Point 5:				
R2-072340 2290 R2-072330 MBMS Notification Rapporteur: Hakan Palm, Ericsson. By Thursday 17 th May 2007. <u>R2-072290 was revised over the reflector in R2-072340 (CR 30)</u> The CRs were agreed over the reflector following the review.	CR CR) <u>33rev</u>	3033 <u>1</u> 3040 / <u>1).</u>	25.331 Rel-6 25.331 Rel-7	Nokia, Nokia Siemens Networks, Ericsson, Motorola, Qualcomm, Vodafone, Infineon TechnologiesEricsson Ericsson, Infineon
Point 6:				

R2-072197 Solution to reordering issue in Enhanced Cell_FACH

InterDigital

Draft1 minutes of the 58th TSG-RAN WG2 meeting Rapporteur: Interdigitial. By 19th June 2007.

Point 7:

R2-072341 A-GNSS in UTRAN (RRC) CR 3032 1 25.331 Rel-7 Orange, Alcatel-Lucent, Nokia Rapporteur: Alain Abinakhoul from Orange. By the 18th May 2007. The CR was revised over the reflector the following week (R2-072341) and agreed. Point 8: R2-072<u>342</u> T305 timer in RRC container at SRNS relocation CR 3030 1 25.331 Rel-7 Huawei Rapporteur: Huawei. By the 18th May 2007. The CR was agreed over the reflector following the review. Point 9: R2-072281 Using special value of HE field to indicate end of an SDU for RLC AM CR 3029 25.331 Rel-7 Ericsson, Nokia, NSN, Samsung Rapporteur: Ericsson.

By the 16th May 2007. The CR was agreed over the reflector the following week.

9 Closing of the meeting

LTE wil start on the Monday with RRC Stage 3 // MAC Stage 3.

The UTRA part will start on the Tuesday in Orlando and finish no later than Thursday evening.

ETFC selection for EDCH will be hte only Rel-6 topic.

Rel-7 will be the priority for UTRA, Rel-8 may be treated with priority on items linked to other groups.

The meeting will finish no later than 16.00 on the Friday.

Annex A: List of delegates (attendees)

Please see the excel filewait for the next version of those minutes.

Annex B: List of documents

	Doc.						(Reserved	
	Name	Title	CR		Spec/Release	Source	by)	Allocations
	R2-071610	Agenda RAN2-58				RAN2 Chairman Nokia Siemens Networks		02: Approval of the agenda
	R2-071611	Additional DCH RAB Combinations	CR		25.993 Rel-7	T-Mobile Orange Alcatel-Lucent	Mr Alain	05.16: TEI7
	R2-071612	A-GNSS in UTRAN (RRC)	CR		25.331 Rel-7	Nokia Nokia Siemens Networks	Abinakhoul	05.13: GNSS in UTRAN
	R2-071613	HSPA RAB Combinations	CR		25.993 Rel-7	T-Mobile	Mr. Alain	05.16: TEI7
	R2-071614	GANSS support to UE capabilities	CR		25. 306 Rel-7	Nokia	Abinakhoul	05.13: GNSS in UTRAN
	R2-071615	Additional HSPA RAB Combinations	CR		25.993 Rel-7	Nokia Siemens Networks		05.16: TEI7
	R2-071616	Combinations into 25.993				Nokia Siemens Networks		other groups 04 13: Other I TE stage 2
	R2-071617	On setting the C-RNTI in RACH message two				Nokia Siemens Networks		subjects
	R2-071618	Window based polling with flexible RLC PDU size Reconfiguration of L2 protocols between enhanced and non-				InterDigital	Mr. Stephen Terry Mr. Stephen	05.05: Improved L2 support for high data rates 05.05: Improved L2 support
	R2-071619	enhanced cells				InterDigital	Terry	for high data rates
	R2-071620	Solutions to reordering issue in enhanced Celll FACH				InterDigital	Mr. Stephen Terry Mr. Stephen	05.04: Enhanced CELL_FACH state in FDD
	R2-071621	Starting and stopping operation in 16QAM mode				InterDigital	Terry Mr. Stephen	05.08: 16 QAM UL
	R2-071622	LTE handover				InterDigital	Terry	04.11.1: Intra LTE
agreed	R2-071623	"Maximum_Serving_Grant" setting at TTI change	CR	317	25.321 Rel-7	Panasonic	M. Otalia	Uplink
	R2-071624	Byte alignment for RLC and MAC headers?				InterDigital	Mr. Stephen Terry Mr. Stephen	04.13: Other LTE stage 2 subjects
	R2-071625	MAC and RLC delivery notification				InterDigital	Terry	subjects
	R2-071626	RACH retransmission number				NEC	Lecompte	procedure
	R2-071627	Automatic paging power control				NEC	Lecompte	subjects
	R2-071628	VoIP Optimized DRX control				NEC	Lecompte	subjects
	R2-071629	Connection re-establishment				NEC	Lecompte Mr. David	04.11.1: Intra LTE
	R2-071630	Principles of uplink timing maintenance				NEC	Lecompte Mr. David	principles
	R2-071631	Need for Maintained DRX at intra LTE handover				NEC	Lecompte	04.11.1: Intra LTE
agreed	R2-071632	RRC Cellid encoding alignment on RANAP	CR	2993	25.331 Rel-7	Alcatel-Lucent		05.16: TEI7
	R2-071633	Reliability Considerations for the Handover Command				Alcatel-Lucent	Mr. Osman Aydin	04.11.1: Intra LTE
	R2-071634	MBMS UE linking for enhanced broadcast mode				NEC	Mr. David	05.03.2: MBMS
		y						

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							Lecompte	
	R2-071635	RLC status reporting during handover				Alcatel-Lucent	Mr. Osman	04 11 1: Intra I TE
	R2-071636	MBMS counting completion	CR		25 331 Rel-6	Alcatel-Lucent	rtyuni	05.03.2: MBMS
	R2-071637	Relevant Information for Handover	ÖN		20.00111010	Alcatel-Lucent	Mr. Osman Aydin	04.11.1: Intra LTE
agreed	R2-071638	Alignment of tabular to ASN 1 for SIB11/SIB12 and event 1J	CR	3002	25.331 Rel-7	NEC	Mr. David Lecompte	05.16: TEI7
agreed	R2-071639	PDCP reinitialisation at SRNS relocation	CR	302	25.323 Rel-7	Alcatel-Lucent		05.16: TEI7
-9							Mr. David	
agreed	R2-071640	Correction of Out of Sequence Reception function	CR	307	25.322 Rel-7	NEC	Lecompte	05.16: TEI7
	R2-071641	Configuration of RACH measurements results in SIB12 Addition of RAB combinaison for SRB mapped on DL "HSDPA +	CR	20	25.308 Rel-7	Alcatel-Lucent		05.16: TEI7
	R2-071642	DCH"	CR		25.993 Rel-6	Alcatel-Lucent Alcatel-Lucent, Ericsson,		05.03: Release 6 corrections 05.07: MIMO, 05.09: 64 QAM
	R2-071643	Correction on 64QAM and MIMO UE capability in RRC	CR		25.331 Rel-7	Nokia		DL
	R2-071644	set.	CR		25.331 Rel-7	Alcatel-Lucent		05.06: CPC 05.03.1: EDD Enhanced
	R2-071645	Correction on E-TFC selection and Serving Grant	CR		25.321 Rel-6	Alcatel-Lucent Nokia <u>, Nokia Siemens</u>		Uplink 05.05: Improved L2 support
	R2-071646	L2 processing				Networks	Mr. Luis Barreto	for high data rates
	R2-071647	MBMS Notification				Nokia	Mr. Luis Barreto	05.03.2: MBMS
	R2-071648	ROHC Compression status				Nokia	Mr. Luis Barreto	05.03: Release 6 corrections
	R2-071649	Multiple packet loss recovery and RLC PDU format in eMBMS				Alcatel-Lucent		04.12: LTE MBMS
	R2-071650	E-MBMS transmission mode selection and switching				Alcatel-Lucent		04.12: LTE MBMS
	R2-071651	Service scheduling for E-MBMS combining				Alcatel-Lucent		04.12: LTE MBMS
	R2-071652	Support of scalable codec for E-MBMS				Alcatel-Lucent		04.12: LTE MBMS
	R2-071653	Transmission of E-MBMS control information				Alcatel-Lucent Andrew Corporation, T-		04.12: LTE MBMS
	R2-071654	SAS-Centric A-GPS - UE requesting additional assistance data	CR		25.305 Rel-7	Mobile USA		05.16: TEI7
	R2-071655	Discussion on Data forwarding options for intra-LTE Handover				Alcatel-Lucent		04.11.1: Intra LTE
	R2-071656	Discussion on target cell synchronisation during intra-LTE HO				Alcatel-Lucent		04.11.1: Intra LTE
	R2-071657	Discussion on Handover Confirm message				Alcatel-Lucent		04.11.1: Intra LTE
	R2-071658	Discussion on RAN implications of Equivalent Tracking areas Consideration on the forwarding strategy in the inter-RAT HO				Alcatel-Lucent		subjects
	R2-071659	scenario				Alcatel-Lucent		04.11.2: LTE to/from UTRAN
	R2-071660	RLC SN				Alcatel-Lucent		subjects 04.13: Other LTE stage 2
	R2-071661	Interaction of DRX and downlink HARQ in LTE Consideration on the polling request for the isolated or last data				Alcatel-Lucent		subjects 04.13: Other LTE stage 2
	R2-071662	transmission in LTE				Alcatel-Lucent		subjects
	R2-071663	cells				IPWireless		layer Enhancements
	R2-071664	Discussion on contents of message 3				Alcatel-Lucent, Samsung		procedure 04.04: Performance
	R2-071665	Discussion on Security mode control for LTE				Alcatel-Lucent		verification
				400				

		Confection to AGN. 1 (7.00 Meps TDD only)	OIX			23.331 146-7	IF WIIEless		03.10. TEI/
	R2-071667	Correction to Tabular (alignment with ASN.1)	CR			25.331 Rel-7	IPWireless		05.16: TEI7
	R2-071668	(TDD only)	CR			25.331 Rel-7	IPWireless, CATT		05.16: TEI7 05.10: MBMS EDD Physical
	R2-071669	MBMS FDD and TDD Physical Layer Improvements	CR			25.331, Rel-7	LG Eletcronics Inc., IP Wireless., IPMobile, UTStarcom	Mr. Patrick Fischer	layer Enhancements, 05.11: MBMS TDD Physical layer Enhancements 05.10: MBMS EDD Physical
	R2-071670	MBMS FDD and TDD Physical Layer Improvements	CR	27	3	25.346 Rel-7	, LG Eletcronics Inc., IP Wireless., IPMobile, UTStarcom	Mr. Patrick Fischer	layer Enhancements, 05.11: MBMS TDD Physical layer Enhancements 05.10: MBMS FDD Physical layer Enhancements 05.11:
	R2-071671	MBMS FDD and TDD Physical Layer Improvements	CR			25.306 Rel-7	LG Eletcronics Inc., IP Wireless., IPMobile, UTStarcom	Mr. Patrick Fischer	MBMS TDD Physical layer Enhancements, 2: Approval of the agenda 05.10: MBMS FDD Physical layer Enhancements, 05.11:
	R2-071672	MBMS FDD and TDD Physical Layer Improvements	CR			25.304 Rel-7	LG Eletcronics Inc., IP Wireless., IPMobile, UTStarcom	Mr. Patrick Fischer Mr. Patrick	MBMS TDD Physical layer Enhancements, 4.4: Performance verification 04.06: Random access
	R2-071673	Retransmission					LG Electonics Inc.	Fischer Mr. Patrick	procedure 04.06: Random access
	R2-071674	Use of short C-RNTIs in message 2					LG Electronics Inc.	Fischer Mr. Detrick	procedure
	R2-071675	UE assisted tracking area update					LG Electronics Inc.	Fischer Mr. Patrick	subjects
	R2-071676	Requirement of simultaneous reading of MCCH and MICH					LG Electronics Inc.	Fischer Mr. Patrick	05.03.2: MBMS 04.13: Other LTE stage 2
	R2-071677	Optimization of RB establishment					LG Electronics Inc.	Fischer Mr. Patrick	subjects
	R2-071678	Open issues for PDCP specifications					(rapporteur)	Fischer Mr. Patrick	04.14.3: PDCP
	R2-071679	Updated PDCP skeleton specification					(rapporteur)	Fischer Mr. Pichard	04.14.3: PDCP
agreed	R2-071680	Signalling connection release at T314/315 expiry	CR	2994		25.331 Rel-7	Motorola	Burbidge	05.16: TEI7
	R2-071681	Urgent Non-urgent split of RACH signatures in E-UTRA					Texas Instruments Inc	Mr. Dishard	procedure
agreed	R2-071682	Cell Update Confirm with RLC re-establish indicator	CR	2995		25.331 Rel-7	Motorola	Burbidge	05.16: TEI7
	R2-071683	MBMS Scheduling Information	CR			25.331 Rel-6	Motorola	Burbidge	05.03.2: MBMS
	R2-071684	A Pre-synchronization method for E-UTRA Handovers					Texas Instruments Inc	Mr. Biobard	04.11.1: Intra LTE
	R2-071685	MSCH transmission - alignment to stage 3 MBMS UE Capability for mapping MTCH/MSCH to legacy S-	CR			25.346 Rel-6	Motorola	Burbidge Mr. Richard	05.03.2: MBMS
	R2-071686	CCPCH Latency and overhead comparison for pre-synchronization in F-	CR			25.306 Rel-6	Motorola	Burbidge	05.03.2: MBMS
	R2-071687	UTRA Handovers					Texas Instruments Inc	Mr. Patrick	04.11.1: Intra LTE
	R2-071688	MBMS in MBSFN mode for FDD					LG Electronics Inc.	Fischer	layer Enhancements

	R2-071689	Measurement reporting, state transitions, and DRX in enhanced CELL_FACH state	CR		25.308	Nokia Siemens Networks, Nokia	Mr. Juho Pirskanen	05.04: Enhanced CELL_FACH state in FDD
	R2-071690	Introduction of Enhanced CELL_FACH state in FDD	CR	84	25.301	Nokia Siemens Networks, Nokia	Mr. Juho Pirskanen	05.04: Enhanced CELL_FACH state in FDD
	D0.074004		00	150	05 204	Nokia Siemens Networks,	Mr. Juho	05.04: Enhanced
agreed	R2-07 1691	Introduction of HS-DSCH operation in CELL_FACH state	CR	100	25.304	Nokia Siemens Networks	Mr Juho	05.04 ⁻ Enhanced
	R2-071692	Introduction of Enhanced CELL_FACH state in FDD	CR		25.302	Nokia	Pirskanen	CELL_FACH state in FDD
		Introduction of HS-DSCH reception in CELL_FACH, URA_PCH				Nokia Siemens Networks,	Mr. Juho	05.04: Enhanced
	R2-071693	and CELL_PCH	CR		25.331	Nokia	Pirskanen	CELL_FACH state in FDD
	R2-071694	Introduction of two DRX schemes in CELL PCH and LIRA PCH	CR		25 331	Nokia Siemens Networks,	NIF. JUNO Pirekanon	CELL EACH state in EDD
	112-07 1034		OIX		20.001	Nokia Siemens Networks.	Mr. Juho	05.04: Enhanced
	R2-071695	Details of Paging in enhanced CELL_FACH state				Nokia	Pirskanen	CELL_FACH state in FDD
							Mr. Juho	
	R2-071696	Removing the limitation of SRNC identity size	CR		25.331	Nokia Siemens Networks	Pirskanen	05.16: TEI7
	P2 071607	Introduction of Wait time to Coll Lindate Confirm	CP		25 221	Nokia Siemens Networks,	Mr. Juno Direkanon	05 16: TEIZ
	112-07 1097	SRNS relocation for carrier sharing between PS only RNS and	GR		20.001	Nokia	Mr Juho	05.16. TEN 05.15: Study Item on scope of
	R2-071698	PS and CS RNS				Nokia Siemens Networks	Pirskanen	future FDD HSPA Evolution
						Nokia Siemens Networks,	Mr. Juho	
	R2-071699	Transport block tables for 64QAM	CR		25.321	Nokia	Pirskanen	05.09: 64 QAM DL
	P2 071700	LTE MRMS Liser Detection Scheme				Freescale Semiconductor		04 12:1 TE MPMS
	112-071700					IIIC	Mr. David	05 03 1: EDD Enhanced
	R2-071701	HSUPA configurations for VoIP and multimedia telephony				NEC	Lecompte	Uplink
		SFN Synchronization without BCH bits for LTE – Latency					•	04.05: System Information
	R2-071702	Reduction Options				SHARP corporation		content & delivery
	D2 071704	Data bandling at bandayor				00000		04.11: LTE_ACTIVE mobility
	112-071704	Data handling at handover				I G Electronics Inc. Nokia I	NSN Samsung	procedures
	R2-071705	Byte alignment for L2 headers				Texas Instruments Inc	tort, ounioung,	04.14.1: MAC
							Mr. David	
	R2-071706	Correction of SRB delay	CR		25.331 Rel-6	NEC	Lecompte	05.03.3: Other
	R2-071707	PDCP/RLC/MAC header format				samsung		04.14.1: MAC
	R2-071708	Variable size RLC SN				samsung		04.14.4: RLC
	R2-071709	Lite RLC versus normal RLC				samsung		04.14.4: RLC
	D0 074740	Principally agreed CR on removing an inperfect optimization on						
	R2-071710	RLC operation during HO				Ericsson, Samsung		05.16: TEI7
	R2-071711	The need for VoIP rate cotnrol				samsung	M. D	05.16: TEI7
	R2-071712	Stage 2 Lindate				(Rapporteur)	Mr. Benoist Séhire	version of the Stage 2
	112 07 17 12					(Rupponeur)	Mr. Benoist	04.14.5: Cell selection &
	R2-071713	Skeleton of UE IDLE mode procedures				Nokia (Rapporteur)	Sébire	reselection
						Nokia, Nokia Siemens	Mr. Benoist	04.14.5: Cell selection &
	R2-071714	UE IDLE mode procedures				Networks	Sébire	reselection
	R2-071715	Minimising Radio Resource Wastage on Handover				Nokia, Nokia Siemens Networks	Sébire	04 11 1: Intra I TE
						Ericsson, NEC, Nokia,	Mr. Benoist	o no na de le le
	R2-071716	Radio Link Failure and Context Recovery				Nokia Siemens Networks	Sébire	04.11.1: Intra LTE
	D0 074747					Nokia, Nokia Siemens	Mr. Benoist	
	R2-071717	Handover Failure Recovery				Networks	Sebire	04.11.1: Intra LIE
	R2-071718	Relevant Information for Handover				Nokia, Nokia Siemens	Mr. Benoist	04.11.1: Intra LTE
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R2-071719	User Plane Data Handling at Handover
R2-071720	Forwarding Instant
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R2-071724	High Level Mobility Principles in a Heterogeneous Network
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R2-071726	Non-contention based Handover
R2-071727	E-UTRA Measurement and Cell Reselection considerations
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R2-071742	Scheduling
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R2-071744	Synchronous adaptive HARQ for E-UTRAN UL
R2-071745	Text Proposal for UL Scheduling

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						Mr. Zhongda	05.05: Improved L2 support
R2-071746	MAC-ehs header open issues				ZTE	Du Mr. Zhongda	for high data rates
R2-071747	Correction of Serving Grant Update Procedure in E-DCH	CR		25.321 Rel6	ZTE	Du	Uplink
				05 00 / D IT		Mr. Zhongda	05.03.1: FDD Enhanced
R2-071748	Correction of Serving Grant Update Procedure in E-DCH	CR		25.321 Rel7	ZIE	Du Mr. Zhongda	05.03.1: FDD Enhanced
R2-071749	Consideration of RG-STEP Size in E-DCH	CR			ZTE	Du	Uplink
R2-071750	MBMS LCR TDD Physical Laver Enhancements	CR		25 436 Rel7	RITT, CMCC, CATT, TD T	ech, Spreadtrum	05.12: MBMS LCR TDD Physical layer Enhancements
		0.11		20.100 1.017	oommanioadono	Mr. Zhongda	
R2-071751	non-synchronized handover procedure				ZTE	Du Mr. Zhongda	04.11.1: Intra LTE
R2-071752	consideration on handover interruption time				ZTE	Du	04.11.1: Intra LTE
D0 074750	DDV mede terreit medel				775	Mr. Zhongda	04.13: Other LTE stage 2
R2-0/1/53	DRX mode transit model				ZIE	Du Mr. Zhongda	04.08: Time alignment
R2-071754	consideration on scenarios for TA update				ZTE	Du	principles
P2 071755	Minor correction on MPMS toxt	CP		25 331 Dol6	775	Mr. Zhongda	05 03 2: MPMS
112-071733		UK		23.331 1100	212	Mr. Zhongda	03.03.2. MDM3
R2-071756	Consideration on MBMS Required UE action				ZTE	Du	05.03.2: MBMS
R2-071757	MBMS services information on DCCH				ZTE	Mr. Zhongda Du	05 03 2' MBMS
					Nokia, Nokia Siemens	Mr. Benoist	00.00.2. 112.110
R2-071759	Neighbour Cell List Considerations				Networks	Sébire	
R2-071760	CR0308 to 25.322 DAR over CCCH	CR	308	25.322 Rel-7	SAMSUNG		05.16: TEI7
D0 074704	DRAFT CR to TS 25.331 [Rel-7] on Introducing 16QAM uplink	00				Dr. Nathan	
R2-071761	support	CR			QUALCOMM Europe	Tenny Dr. Nathan	05.08: 16 QAM UL 04.05: System Information
R2-071762	Scheduling of D-BCH				QUALCOMM Europe	Tenny	content & delivery
D2 071762	Structure of BCH					Dr. Nathan	04.05: System Information
R2-071703					QUALCOMM Europe	Dr. Nathan	content & delivery
R2-071764	Proposed CR to TS 25.331 [Rel-7] on Change of UE capability	CR			Nokia	Tenny	05.16: TEI7
R2-071765	E-MBMS scheduling				QUALCOMM Europe	Dr. Nathan Tenny	04 12 [.] I TE MBMS
						Dr. Nathan	04.11: LTE_ACTIVE mobility
R2-071766	Text proposal on measurement gap scheduling				QUALCOMM Europe	Tenny Dr. Nathan	procedures
R2-071767	HSPA VoIP Service Continuity in Rel-7				QUALCOMM Europe	Tenny	05.16: TEI7
R2-071768	System information contents and the periodicity for No NCI				Panasonic		04.05: System Information content & delivery
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R2-071769	System information reception for Inter-frequency mobility				Panasonic		content & delivery
R2-071770	Cell reselection before call setup procedure				Panasonic		content & delivery
							04.06: Random access
R2-071771	Remaining issues on Random Access procedure usage				Panasonic		procedure
R2-071772	CPC parameter ranges				Qualcomm Europe		05.06: CPC
R2-071773	Measurement Functionality split for Broadcast and Dedicated				Panasonic		04.11.1: Intra LTE

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R2-071776	MCCH Transmission in LTE			Panasonic		04.12: LTE MBMS
R2-071777	Uplink feedback for eMBMS SFN operations			Panasonic		04.12: LTE MBMS 04.13: Other LTE stage 2
R2-071778	PDCP SN reuse in RLC PDU for LTE			Panasonic		subjects 04.13: Other LTE stage 2
R2-071779	UL HARQ Protocol issues			Panasonic		subjects 04.13: Other LTE stage 2
R2-071780	RLC TM mode for U-Plane			Panasonic		subjects 04.13: Other LTE stage 2
R2-071781	MAC PDU format for LTE			Panasonic		subjects 04.13: Other LTE stage 2
R2-071782	Security Context Information and Security Functionality for LTE			Panasonic		subjects 04.13: Other LTE stage 2
R2-0/1/83						05.07: MIMO, 05.09: 64 QAM
R2-0/1/84	Open items with release 7 UE categories			Qualcomm Europe		DL 04.05: System Information
R2-0/1/85				huawei		04.08: Time alignment
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R2-071787 R2-071788	MBMS Network Optimization	CR		huawei		04.12: LTE MBMS
R2-071789	LTE RLC functions and services			huawei		04.13: Other LTE stage 2 subjects
R2-071790	T305 timer in RRC container at SRNS relocation	CR	25.331 Rel-7	huawei		05.16: TEI7 05.14: 1.28 Mcps TDD
R2-071791	Clarification for control of E-RUCCH transmission in LCR TDD	CR	25.321 Rel-7	ZTE, CATT, TD TECH LG Electronics Inc.,		Enhanced Uplink
R2-071792	Discussion on RLC Control Information Delivery		25.322 in	SAMSUNG		05.16: TEI7
R2-071793	Proposed CR to 25.322 Correction to Control Information transmission with two logical channels	CR	relation to R2- 071792	LG Electronics Inc., SAMSUNG		05.16: TEI7
R2-071794	Introduction of E-TFC Selection for 1.28Mcps TDD	CR	25.321 Rel-7	ZTE, CATT, TD TECH		05.14: 1.28 Mcps TDD Enhanced Uplink
R2-071795	Proposed CR to 25.322 Removal of two channel configurations in RLC	CR	relation to R2- 071792	LG Electronics Inc., SAMSUNG		05.16: TEI7
R2-071796	On the issue of HARQ/ARQ interaction			LG Electronics Inc. RITT, CMCC, CATT, TD-		04.13: Other LTE stage 2 subjects
R2-071797	Overview of MBMS LCR TDD Physical Layer Enhancements			Tech, ZTE, Spreadtrum Communications RITT, CMCC, CATT, TD-	Mrs. Haiyang Quan	05.12: MBMS LCR TDD Physical layer Enhancements
R2-071798	Introduction of scenarios of 1.28Mcps TDD for TR25.905			Tech, ZTE, Spreadtrum Communications RITT, CMCC, CATT, TD-	Mrs. Haiyang Quan	05.12: MBMS LCR TDD Physical layer Enhancements
R2-071799	Introduce MBMS LCR TDD Physical Layer Enhancement to TR 25.905	CR	25.905 Rel-7	Tech, ZTE, Spreadtrum Communications	Mrs. Haiyang Quan	05.12: MBMS LCR TDD Physical layer Enhancements
R2-071800	Protocol termination for HO signalling			QUALCOMM Europe		04.11.1: Intra LTE
R2-071801	Considerations on RRC re-establishment			QUALCOMM Europe		04.11.1: Intra LTE

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R2-071802	Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25.346	CR	25.346 Rel-7	RITT, CMCC, CATT, TD- Tech, ZTE, Spreadtrum Communications	Mrs. Haiyang Quan	05.12: MBMS LCR TDD Physical layer Enhancements 04.13: Other LTE stage 2
R2-071803	Considerations on SRB establishment			QUALCOMM Europe		subjects
R2-071804	Camping load balancing in LTE			QUALCOMM Europe		subjects
R2-071805	Optimization for Tracking Area Update signalling			QUALCOMM Europe		subjects
R2-071806	UE capability handling in LTE			QUALCOMM Europe RITT, CMCC, CATT, TD-		04.10: UE capabilities
R2-071807	UE Capabilities for LCR TDD MBSFN			Tech, ZTE, Spreadtrum Communications	Mrs. Haiyang Quan	05.12: MBMS LCR TDD Physical layer Enhancements 04.02: Items treated in e-mail
R2-071808	Summary of email discussion on cell reselection parameters in LTE			Ericsson	Mr. Janne Peisa	discussion (rapporteur report only)
R2-071809	Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25.306	CR	25.306 Rel-7	Tech, ZTE, Spreadtrum Communications	Mrs. Haiyang Quan	05.12: MBMS LCR TDD Physical layer Enhancements
R2-071810	LTE Performance verification – U-plane and C-plane latencies			Nokia Siemens Networks, Samsung, NEC Ericsson, Nokia, Nokia	Mr. Janne Peisa	04.04: Performance verification
R2-071811	LTE Performance verification – Handover latency			Siemens Networks, Samsung, NEC RITT_CMCC_CATT_TD-	Mr. Janne Peisa	04.04: Performance verification
R2-071812	Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25.304	CR	25.304 Rel-7	Tech, ZTE, Spreadtrum Communications	Mrs. Haiyang Quan	05.12: MBMS LCR TDD Physical layer Enhancements
R2-071813	Scheduling of System Information			Ericsson	Peisa	content & delivery
R2-071814	The content and timing of BCH			Ericsson	Mr. Janne Peisa	04.05: System Information content & delivery
R2-071815	Transmission of BCH			Ericsson	Mr. Janne Peisa	04.05: System Information content & delivery
R2-071816	Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25.331	CR	25.331 Rel-7	RITT, CMCC, CATT, TD- Tech, ZTE, Spreadtrum Communications	Mrs. Haiyang Quan	05.12: MBMS LCR TDD Physical layer Enhancements
R2-071817	Solution for sending NAS together with RRC connection request			Ericsson	Mr. Janne Peisa	04.06: Random access procedure
R2-071818	DRX control for LTE_ACTIVE and VoIP			Ericsson	Mr. Janne Peisa	
R2-071819	Signaling Method for Liploading LIE Capability Information			Friesson	Mr. Janne Peisa	04 10: LIE canabilities
R2-071820	On the details of the dedicated preamble at intra-LTE handover			Ericsson	Mr. Janne Peisa	04 11 1: Intra I TE
R2-071020				Elicsson	Mr. Janne	
R2-071821	Mobility during attach			Ericsson	Pelsa Mr. Janne	04.11.1: Intra LTE
R2-071822	User plane handling at mobility			Ericsson	Peisa Mr. Janne	04.11.1: Intra LTE
R2-071823	E-UTRA Measurement Configuration and Control			Ericsson	Peisa Mr. Janne	04.11.1: Intra LTE
R2-071824	Radio link failure at handover			Ericsson	Peisa Mr. Janne	04.11.1: Intra LTE
R2-071825	Mapping of MBMS logical channels to DL-SCH			Ericsson	Peisa	04.12: LTE MBMS
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R2-071826	Multiplexing of MBMS services			Ericsson, Samsung	Peisa Mr. Janno	04.12: LTE MBMS
R2-071827	LTE MBMS functionality			Ericsson	Peisa	04.12: LTE MBMS
R2-071828	DL-SCH supporting single cell PTM with HARQ/CQI			Ericsson	Mr. Janne Peisa	04.12: LTE MBMS
R2-071829	Transmission of MCCH			Ericsson	Peisa	04.12: LTE MBMS
R2-071830	A Semi-Autonomous DRX Control Scheme for LTE_ACTIVE			Fricsson	Mr. Janne Peisa	04.13: Other LTE stage 2 subjects
112 07 1000				Endodon	Mr. Janne	04.13: Other LTE stage 2
R2-071831	On Intra-LTE Cell Reselection Methods			Ericsson	Peisa Mr. Janne	subjects 04 13: Other LTE stage 2
R2-071832	Radio Resource Management Aspects of Inter-RAT Handovers			Ericsson	Peisa	subjects
R2-071833	On Inter-RAT Cell Reselection Principles			Friesson	Mr. Janne Peisa	04.13: Other LTE stage 2 subjects
112 07 1000				Lindston	Mr. Janne	04.13: Other LTE stage 2
R2-071834	PDCP PDU header formats in LTE			Ericsson	Peisa	subjects
R2-071835	Support for ROHC in SAF/LTF			Fricsson	Mr. Janne Peisa	04.13: Other LTE stage 2 subjects
1.2 01 1000				211000011	Mr. Janne	04.13: Other LTE stage 2
R2-071836	Configuration of PDCP in SAE/LTE			Ericsson	Peisa	subjects
D2 071937	1.2 Sequence Number in LTE			Friesson	Mr. Janne Roise	04.13: Other LTE stage 2 subjects
112-07 1037				LIICSSOIT	Mr. Janne	04.13: Other LTE stage 2
R2-071838	HARQ Configuration for LTE			Ericsson	Peisa	subjects
R2-071839	Byte alignment for user plane protocols in LTE			Friesson	Mr. Janne Peisa	04.13: Other LTE stage 2 subjects
P2 071840	POHC Compliant Schoduling				1 0100	505,5015
112-07 1040	Kono compliant Scheduling			LO LIECTORICS INC.	Mr. Janne	04.13: Other LTE stage 2
R2-071841	Resource fragmentation in LTE uplink			Ericsson	Peisa	subjects
D2 074042	Chara wa of Chara 3 EEC			Education	Mr. Janne	04.13: Other LTE stage 2
R2-071842	Clean up of Stage 2 FFS			Encsson	Peisa Mr. Janne	04 13: Other I TE stage 2
R2-071843	NDI-less HARQ operation			Ericsson	Peisa	subjects
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R2-071844	HARQ-ARQ Interactions for NACK to ACK error			Ericsson	Peisa	Subjects 05.14:1.28 Mone TDD
R2-071845	mode	CR	25.331 Rel-7	ZTE. CATT		Enhanced Uplink
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R2-071846	Number of logical channels in RB			LG Electronics Inc.	M. 1	subjects
R2-071847	COL Reporting with regards to DRX operation			Friesson	Mr. Janne Peisa	04.13: Other LIE stage 2 subjects
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R2-071848	Discussion on Uplink Traffic Shaping			LG Electronics Inc.		subjects
R2-071849	PDCP Sequence Number and ROHCv2			LG Electronics Inc		04.13: Other LIE stage 2 subjects
112 07 1040					Mr. Janne	05.03.1: FDD Enhanced
R2-071850	Clarification on E-DCH Scheduled Grant Payload Calculation	CR	25.321 Rel-6	Ericsson	Peisa	Uplink
R2-071851	Maintenance of PMM connection for MBMS PTP recention	CR	25 331 Rel-6	Friceson	Mr. Janne	05 03 2: MBMS
112-07 1031		OIX	20.0011(61-0	Encoson	Mr. Janne	03.03.2. WDWO
R2-071852	Content of MSI message when sent on DCCH	CR	25.331 Rel-6	Ericsson	Peisa	05.03.2: MBMS
R2-071852	Relative ordering of MBMS Selected Services when indicated to	CR	25 331 Rel 6	Friesson	Mr. Janne Peisa	05 03 2: MBMS
112-07 1055	ING NELWORK	407	20.001 110-0	L1035011	1 5130	
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	R2-071854	Background scan during MBMS PTM reception	CR		25.331 Rel-7	Ericsson	Mr. Janne Peisa Mr. Janno	05.03.2: MBMS
	R2-071855	Corrections to support for RFC3095 from Release-6	CR		25.323 Rel-6	Ericsson	Peisa	05.03.3: Other
	R2-071856	(RFC3095)	CR		25.323 Rel-6	Ericsson	Peisa	05.03.3: Other
	R2-071857	Incorrect reference to 25.993 for default configuration 17	CR		25.331 Rel-6	Ericsson	Peisa	05.03.3: Other
	R2-071858	Corrections to tabular for non-scheduled transmission for LCR TDD	CR		25.331 Rel-7	CATT, TD-Tech, ZTE	Mrs. Halyang Quan	Enhanced Uplink
	R2-071859	Removal of redundant IE 'MBMS-PreferredFreqRequest-r6'	CR		25.331 Rel-6	Ericsson	Peisa	05.03.3: Other
	R2-071860	Some Small Editorial Corrections to TS 25.321	CR		25.321 Rel-7	CATT	Mrs. Halyang Quan	US.14: 1.28 MCps TDD Enhanced Uplink
	R2-071861	triggering E-DCH serving cell change in LCR TDD system	CR		25.331 Rel-7	ZTE, CATT		05.14: 1.28 Mcps TDD Enhanced Uplink
agreed	R2-071862	S-CCPCH and PCH channel selection for Band IV or Band IX or Band X	CR	0157	25.304 Rel-7	Nokia Siemens Networks		05.16: TEI7
	R2-071863	Some clarifications related to E-DCH Scheduling Information in TDD mode	CR		25.321 Rel-7	ZTE, CATT		05.14: 1.28 Mcps TDD Enhanced Uplink
	R2-071864	Synchronised Handover				Nokia, Nokia Siemens Networks	Mr. Benoist Sébire	04.11.1: Intra LTE
	R2-071865	Some corrections for LCR TDD EUL to TR 30.302	CR	0001	30.302 Rel-7	CATT, TD-Tech, ZTE	Mrs. Haiyang Quan	05.14: 1.28 Mcps TDD Enhanced Uplink
agreed	R2-071866	Initialisation of CFN calculation for CELL_FACH	CR	2999	25.331 Rel-7	Nokia Siemens Networks	Mrs. Haivang	05.16: TEI7 05.14: 1.28 Mcps TDD
	R2-071867	Correction to definition of maxNumE-AGCH for TDD	CR		25.331 Rel-7	CATT, IPWireless	Quan	Enhanced Uplink
agreed	R2-071868	Feature Clean Up leftover: Removal of DRAC leftover	CR	2998	25.331 Rel7	Nokia Siemens Networks	Mrs Haivang	05.16: TEI7 04.04: Performance
	R2-071869	type 2				CATT	Quan Mrs. Haiyang	verification
	R2-071870	Notification scheme for system information Change				CATT	Quan Mrs. Haiyang	content & delivery
	R2-071871	Downlink HARQ Error Detection in LTE				CATT	Quan Mrs. Haiyang	subjects
	R2-071872	MBMS notification in E-UTRAN				CATT	Quan Mrs. Haiyang	04.12: LTE MBMS
	R2-071873	MBMS control signalling in E-UTRAN				CATT	Quan	04.12: LTE MBMS
	R2-071874	data rates	CR		25.301 Rel-7	Ericsson	Peisa Mr. Jonno	for high data rates
	R2-071875	Enhanced CELL_FACH state	CR		25.321 Rel-7	Ericsson, Nokia, NSN	Peisa Mr. Jonno	CELL_FACH state in FDD
	R2-071876	Introduction of Improved L2 support for high data rates	CR		25.322 Rel-7	Ericsson	Peisa	for high data rates
	R2-071877	Introduction of Improved L2 support for high data rates			25.331 Rel-7	Ericsson	Peisa	for high data rates
	R2-071878	Discussion on short transaction time				LG Electronics Inc.	Ma Janaa	subjects
	R2-071879	Finalizing MAC-ehs				Ericsson	wr. Janne Peisa	for high data rates
	R2-071880	Active Recovery of MBMS Data				LG Electronics Inc.	Ma Janaa	04.12: LTE MBMS
	R2-071881	L1 parameter name changes	CR		25.308 Rel-7	Ericsson	Peisa	05.06: CPC

agreed agreed agreed

	-					Mr.Janne	
R2-071882	L1 parameter name changes	CR		25.321 Rel-7	Ericsson	Peisa	05.06: CPC
R2-071883	A way forward for registration in densely-populated area(RED)				NTT DoCoMo		05.18: TEI8
						Mr. Janne	
R2-071884	Restriction on the number of MIMO processes	CR		25.331 Rel-7	Ericsson, Philips	Peisa Mr. Janne	05.07: MIMO 05.07: MIMO, 05.09: 64 QAM
R2-071885	Definition for higher bit rate bearers due to 64QAM and MIMO				Ericsson	Peisa	DL 04.13: Other LTE stage 2
R2-071886	Discussion on MAC PDU structure				LG Electronics Inc.		subjects 04 13: Other LTE stage 2
R2-071887	Scheduling consideration on L2 Headers				LG Electronics Inc.	Mr. Janne	subjects 05.07: MIMO_05.09: 64.0AM
R2-071888	DL64QAM	CR		25.306 Rel-7	Ericsson, Alcatel-Lucent	Peisa	DL
R2-071889	MBMS User authentication				LG Electronics Inc.	Mr. Janne	04.12: LTE MBMS 05.10: MBMS FDD Physical
R2-071890	Introduction of TDM scheme for MBSFN				Ericsson	Peisa Mr. Janne	layer Enhancements 05.11: MBMS TDD Physical
R2-071891	Support for DL only SFN operation for MBMS FDD				Ericsson	Peisa Mr. Janne	layer Enhancements
R2-071892	Support for DL only SFN operation for MBMS FDD	CR		25.346 Rel-7	Ericsson	Peisa	layer Enhancements
R2-071893	Support for DL only SFN operation for MBMS FDD	CR		25.331 Rel-7	Ericsson	Peisa	layer Enhancements
R2-071894	CR implementation issues 25.331 v7.4.0 (2007-03)	CR		25.331 Rel-7	Ericsson	Mr. Janne Peisa	05.16: TEI7
R2-071895	Correction of inconsistency in 25.331 related to UE-sending of capabilities.	CR		25.331 Rel-7	Ericsson	Mr. Janne Peisa	05.16: TEI7
R2-071896	Using special value of HE field to indicate end of an SDU for RLC AM	CR		25.322 Rel-7	Ericsson, Nokia, NSN, Samsung	Mr. Janne Peisa	05.16: TEI7
R2-071897	Using special value of HE field to indicate end of an SDU for RLC AM	CR		25.331 Rel-7	Ericsson, Nokia, NSN, Samsung	Mr. Janne Peisa	05.16: TEI7
					5	Mr. Janne	
R2-071898	Correction of STTD Indicator for F-DPCH Tx Diversity	CR	2996	25.331 Rel-7	Ericsson	Peisa Mr. Janne	05.16: TEI7
R2-071899	Introduction of GAN PS handover	CR	156	25.306 Rel-7	Ericsson	Peisa Mr. Janne	05.16: TEI7
R2-071900	Introduction of GAN PS handover	CR	2997	25.331 Rel-7	Ericsson	Peisa Mr. Gert- Ian	05.16: TEI7 04.13: Other LTE stage 2
R2-071901	CQI handling during DRX				Samsung	van Lieshout	subjects
R2-071902	Release-7 dependencies				Motorola, Nokia, NSN	van Lieshout	05: UTRA/UTRAN
R2-071903	Maintenance of UL sync				Samsung	van Lieshout	principles
R2-071904	Idle mode paging				Samsung	Mr. Gert-Jan van Lieshout	04.13: Other LTE stage 2 subjects
R2-071905	Optimization of downlink persistent scheduling				ETRI		04.13: Other LTE stage 2 subjects
R2-071906	Access Service Classes in LTE				Samsung	Mr. Gert-Jan van Lieshout	04.06: Random access procedure
R2-071908	NAS message handling during mobility				Samsung	Mr. Gert-Jan van Lieshout	04.11.1: Intra LTE
R2-071909	UL control transmissions during DRX				Samsung, NTT DoCoMo	Mr. Gert-Jan van Lieshout	04.13: Other LTE stage 2 subjects
P2 071010	Counting in E MBMS				IDW/irolooo	. S. Eloonodi	04 12: LTE MPMS
K2-07 1910					IF WIREless		04.12: LIE WBWD

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R2-071911	System information structure (with TP)				Samsung	Mr. Himke van der Velde	04.05: System Information content & delivery
P2-071012	System information scheduling and change notification				Sameung	Mr. Himke van	04.05: System Information
TZ-071012					Damsung	del velde	04.13: Other LTE stage 2
R2-071913	RLC PDU format for LTE				Panasonic	Mr. Himke van	subjects 04.13: Other LTE stage 2
R2-071914	Radio connection establishment				Samsung	der Velde Mr. Himke van	subjects 04 13: Other I TE stage 2
R2-071915	cells				Samsung	der Velde	subjects
R2-071916	Neighbouring cell information				Samsung	der Velde	subjects
R2-071917	Recap of handover procedure, control plane aspects (with TP)				Samsung	Mr. Himke van der Velde	04.11.1: Intra LTE
P2-071018	Evaluation of backward bandover schemes				Samsung	Mr. Himke van	04 11 1: Intra I TE
R2-071919	LTE MBMS Notifications				LG Electronics Inc	del velde	04.12.1 TE MBMS
	LTE Performance verification for TDD – U-plane and C-plane						04.04: Performance
R2-071920	latencies				IPWireless	Mr. Himke van	verification
R2-071921	RRC skeleton				Rapporteur (Samsung)	der Velde	04.14.2: RRC
R2-071922	LTE MBMS Transmission				LG Electronics Inc.		04.12: LTE MBMS
R2-071923	Discussion on Message 4 in Random Access				LG Electronics Inc.		procedure
R2-071924	Text proposal for RRC chapter: General				Samsung	Mr. Himke van der Velde	04.14.2: RRC
R2-071925	Label characteristics and PBR for non-GBR				IPWireless		04.13: Other LTE stage 2 subjects
R2-071926	Transmission of LTE Paging				LG Electronics Inc.		04.13: Other LTE stage 2 subjects
R2-071927	Paging group indication				IPWireless		04.13: Other LTE stage 2 subjects
R2-071928	Discussion on Data Transmission in CELL_PCH				LG Electronics Inc.		05.04: Enhanced CELL_FACH state in FDD
R2-071930	Multi-level DRX Operation in CELL PCH				LG Electronics Inc.		05.04: Enhanced CELL FACH state in FDD
R2-071931	Contention-free Intra-LTE handover in synchronous network				IPWireless		
R2-071932	Registration on home & private eNBs				Samsung, LG Eletcronics Inc.	Mr. Himke van der Velde	04.13: Other LTE stage 2 subjects
P2 071033	PLMN selection ping pang control	CP	3000	25 221 Pol 7	Nokia, 3, Ericsson,	Mr. Simone	05 16: TEI7
RZ-07 1955	PLININ Selection ping-poing control	GR	3000	25.551 Rei-7	Nokia, 3, Ericsson,	Mr. Simone	05.10. TEN
R2-071934	PLMN selection ping-pong control	CR	158	25.304 Rel-7	Motorola, NSN	Provvedi Mr. Simone	05.16: TEI7 05.03.1: FDD Enhanced
R2-071935	E-TFC selection clarifications Default MBMS activation time and 'MBMS all unmodified p-t-m	CR		25.321 Rel-6	Nokia	Provvedi Mr. Simone	Uplink
R2-071936	services'	CR		25.331 Rel-6	Nokia	Provvedi	05.03.2: MBMS
R2-071938	Clarification on RA procedure				LG Electronics Inc.		procedure
R2-071939	Optimization for message 2 transmission				LG Electronics Inc.		procedure
R2-071940	Uplink timing alignment				LG Electronics Inc.		principles

R2-071941	Periodic measurement reporting with semi-persistent scheduling			LG Electronics Inc.		04.11.1: Intra LTE 04.13: Other LTE stage 2
R2-071942	ACK to NACK error detecting mechanism			LG Electronics Inc.		subjects
R2-071943	Discussion on need-based adaptive HARQ in E-UTRAN UL			LG Electronics Inc.		subjects 04.13: Other LTE stage 2
R2-071944	Transition indicator for VoIP in UL			LG Electronics Inc.		subjects
R2-071946	Early UL Synchronization Scheme for inter-eNodeB Handover			ITRI T-Mobile, NTT DoCoMo, KPN, China Mobile, Orange, Vodafone, Sprint, Telecom Italia, Telefónica,		04.11.1: Intra LTE
R2-071947	UE Support for self-configuration and self-optimisation - Proposal RAN2 relevant part)	for Stage2 (only		Huawei, Infineon, Nokia, Nokia-Siemens Networks, Samsung T-Mobile, Vodafone,	Mr. Axel Klatt	04.13: Other LTE stage 2 subjects
R2-071948	Generic 'subscriber type' indication via S1 interface			Orange, Telecom Italia, Telefónica T. Mabila, NTT DoCoMo	Mr. Axel Klatt	04.13: Other LTE stage 2 subjects
R2-071949	Support of procedures/features related to intra-frequency mobility			Vodafone, Orange, Telecom Italia T-Mobile, NTT DoCoMo	Mr. Axel Klatt	04.14.5: Cell selection & reselection
R2-071950	Support of procedures/features related to inter-frequency/inter- RAT mobility			Vodafone, Orange, Telecom Italia T-Mobile, Telecom Italia.	Mr. Axel Klatt	04.14.5: Cell selection & reselection 04.14.5: Cell selection &
R2-071951	Stage3 text proposal on idle mode procedures in E-UTRAN			Vodafone, China Mobile	Mr. Axel Klatt	reselection 04 13: Other I TE stage 2
R2-071952	The Urgency of HARQ-ARQ Interactions			ITRI		subjects
R2-071953	A New Measurement to Support UL Scheduler Operation Ambiguous description about the reconfiguration scenarios and			Mitsubishi Electric Corp.		subjects
R2-071954	ciphering of TM RBs	CR	25.331 Rel-6	Sunplus mMobile	Mr. Louis Lu	05.03.3: Other
R2-071955	UE behaviour unspecified in receiving Transport Format Set	CR	25.331 Rel-6	Sunplus mMobile	Mr. Louis Lu Mr. Gordon	05.03.3: Other
R2-071956	DRX Operation During Handover			RIM	Young	04.11.1: Intra LTE
R2-071957	Incomplete exception description in UE-based OTDOA Contradictive behaviour in measurement rules for cell re-	CR	25.331 Rel-6	Sunplus mMobile	Mr. Louis Lu	05.03.3: Other
R2-071958	selection in CELL_FACH	CR	25.304 Rel-6	Sunplus mMobile	Mr. Louis Lu Mr. Gordon	05.03.3: Other 04.13: Other LTE stage 2
R2-071959	Adaptive Modulation and Coding for LTE VoIP			RIM	Young	subjects
R2-071960	IMSI	CR	25.304 Rel-6	Sunplus mMobile	Mr. Louis Lu Mr. Gordon	05.03.3: Other
R2-071961	Uplink VoIP Scheduling with Fast Indication			RIM	Young Mr. Gordon	
R2-071962	Polling Performance for LTE MBMS			RIM	Young Mr. Gordon	04.12: LTE MBMS
R2-071963	MCCH Design			RIM	Young Mr. Gordon	04.12: LTE MBMS
R2-071964	Multi-Stage Setup for LTE MBMS Transmissions			RIM	Young Mr. Gordon	04.12: LTE MBMS
R2-071965	Pathloss measurements for cells in the detected set	CR	25.331 Rel-7	RIM	Young	05.16: TEI7
R2-071966	The further discussion on eMBMS scenarios of deployment			China Mobile		04.12: LTE MBMS

R2-071967	Use of eMBMS uplink feedback		China Mobile		04.12: LTE MBMS
R2-071968	P-BCH Transmission Interval in LTE		NTT DoCoMo, Inc., NEC		content & delivery
R2-071969	Paging Procedure in LTE		NTT DoCoMo, Inc., NEC		subjects
R2-071970	Contention Resolution and Initial Random Access		TD Tech Ltd.		procedure
R2-071971	Discussion on Uplink Scheduling Request		TD Tech Ltd.		
					04.14: Stage 3: rapporteur
R2-071972	36.306 E-UTRA UE Radio Access Capabilities		Motorola (Rapporteur)	Mr. Richard Burbidge	inputs (based on the Stage 2 status)
R2-071973	User Plane handling during inter-eNB HO		NEC	Singh	04.11.1: Intra LTE
R2-071974	Resource allocations in target cell after Handover		NEC	Singh	04.11.1: Intra LTE
R2-071975	Text Proposal for Intra-I TE Handover		NEC	Mr. Jagdeep Singh	04 11 1: Intra I TE
112 07 1070			NLO	Mr. Jagdeep	04.13: Other LTE stage 2
R2-071976	Clarification on use of Prioritized Bit Rate (PBR)		NEC	Singh	subjects
R2-071977	ROHC reset during inter-eNB handover		Nortel		04.11.1: Intra LTE
R2-071978	Inter eNB handover in a synchronous network		Nortel		04.11.1: Intra LTE
R2-071979	Forward Hand-Off Need, Simulations results		Nortel		04.11.1: Intra LTE
R2-071980	Forward Hand-Off options		Nortel		04.11.1: Intra LTE
R2-071981	Hierarchical MCCH		Nortel		04.12: LTE MBMS
R2-071982	Admission Control at Target eNB		Nortel		04.11.1: Intra LTE
R2-071983	Discussion of eMBMS Uplink Feedback Schemes		NEC	Mr. Jagdeep Singh Mr. Paul	04.12: LTE MBMS 04.13: Other LTE stage 2
R2-071984	HARQ/ARQ Interactions		Philips	Bucknell	subjects
R2-071985	Alignment of CPC UL DRX TTI due to Compressed Mode		INFINEON		05.06: CPC
50.074000				Mr. Simone	05.05: Improved L2 support
R2-071986	HSPA+ L2 Buffering Calculations		Nokia, NSN	Provvedi	for high data rates 05 17: Other Rel-7 Study
R2-071987	Modification of Annex B	CR	ZTE		Items
D0.074000	COL secondizer in E-MBMC single cell transmission		Alestel Lucent	Mr. Stanislas	
R2-07 1966	CQI reporting in E-MBMS single cell transmission		Alcalel-Lucent	Mr. Janne	04.12: LTE MBMS 04.13: Other LTE stage 2
R2-071989	Idle Gaps for Handover Measurements in E-UTRAN		Ericsson	Peisa	subjects 04.13: Other LTE stage 2
R2-071990	DRX procedure for VoIP		QUALCOMM Europe		subjects
R2-071991	Content of Message 2		QUALCOMM Europe		procedure
R2-071992	High Level Comparison of Handover in GSM, UMTS and LTE		QUALCOMM Europe		procedures 04 11: LTE_ACTIVE mobility
R2-071993	LTE Intra/Inter-RAT handover algorithms for LTE_ACTIVE state		QUALCOMM Europe		procedures
R2-071994	Impact of HARQ Termination Statistics on UL VoIP Capacity		QUALCOMM Europe		
R2-071995	On Uplink Scheduling for VoIP		QUALCOMM Europe		
D2 074000	Uslish Construction Maintenance		Matazala		04.08: Time alignment
R2-071996	Uplink Synchronization Maintenance		IVIOLOFOIA		principles

R2-071997	MAC specification - Editors			Ericsson, QUALCOMM Europe	Mr. Janne Peisa	04.14.1: MAC
R2-071998	Considerations on MBMS Resource Allocation			Motorola		04.12: LTE MBMS
R2-071999	Multicell EMBMS CQI Feedback			Motorola		04.12: LTE MBMS
R2-072000	Further Results on EMBMS Transmission Configurations			Motorola		04.12: LTE MBMS 04.02: Items treated in e-mail discussion (rapporteur report
R2-072001	[Point #5] System Information Delivery - E-mail Report			Rapporteur		only) 04.02: Items treated in e-mail discussion (rapporteur report
R2-072002	Handover Interruption Times and Duration			Motorola		04 11 1: Intro I TE
R2-072003	PACH Proamble Poservation for Handover			Motorola		04.11.1. Intra LTE
R2-072004	Considerations on weight foodback shared for E MDMC			TTD		
R2-072005	Considerations on uplink leedback channel for E-MBMS			EIRI		04.12: LTE MBMS 04.13: Other LTE stage 2
R2-072006	RLC header design Additional results on over-provisioning required to accommodate			Motorola		subjects
R2-072007	overlapping SFN areas			Motorola		04.12: LTE MBMS
R2-072008	Load balancing solutions for LTE			Electronics	falige, LG	procedures 04.11: LTE_ACTIVE mobility
R2-072009	Measurement gap control principles			NTT DoCoMo NTT DoCoMo, Vodafone, ⊺	Felecom Italia, T-	procedures 04.05: System Information
R2-072010	Operator's view on neighbour cell information			Mobile, Orange NTT DoCoMo, Orange, Te	lecom Italia,	content & delivery 04.13: Other LTE stage 2
R2-072011	Rationale for standardising eNB measurements E-UTRAN Measurement Gap Control for Inter-Frequency and			Telefonica, T-Mobile, Voda	fone	subjects 04.11: LTE_ACTIVE mobility
R2-072012	Inter-RAT Handover			Motorola		procedures 04.13: Other LTE stage 2
R2-072013	MAC header for control message in LTE			ASUSTeK		subjects 04.08: Time alignment
R2-072014	Uplink synchronisation maintenance			NTT DoCoMo, Inc.		principles 04.13: Other LTE stage 2
R2-072015	MAC PDU structure for LTE			NTT DoCoMo, Inc.	Mr. Etienne	subjects
R2-072017	Buffering requirement for joint HS-DSCH E-DCH categories	CR	25.306 Rel-7	Qualcomm Europe	Chaponnière Mr. Etienne	05.07: MIMO
R2-072018	Correction of MIMO and 64QAM buffering requirement	CR	25.306 Rel-7	Qualcomm Europe	Chaponnière Mr. Etienne	05.07: MIMO 04 13: Other LTE stage 2
R2-072019	Cryptosync in LTE			Qualcomm Europe	Chaponnière Mr. Etienne	subjects
R2-072020	Introduction of enhanced F-DPCH	CR	25.331 Rel-7	Qualcomm Europe	Chaponnière Mr. Etienne	05.16: TEI7 05.05: Improved I 2 support
R2-072021	L2 Improvements and polling			Qualcomm Europe	Chaponnière Mr. Etienne	for high data rates
R2-072022	L2 improvements and UE processing			Qualcomm Europe	Chaponnière Mr. Etienne	for high data rates
R2-072023	Number of HARQ processes			Qualcomm Europe	Chaponnière Mr. Etienne	verification 04.13: Other LTE stage 2
R2-072024	PDCP reordering			Qualcomm Europe	Chaponnière	subjects
R2-072025	Uplink Feedback for E-MBMS			Motorola		04.12: LTE MBMS
R2-072026	Clarification on assigning HARQ process IDs for MIMO	CR	25.331 Rel-7	ASUSTeK		05.07: MIMO

	R2-072027	Corrections on modulus base in UM in RLC	CR		25.322 Rel-6	ASUSTeK		05.03.2: MBMS
	R2-072028	Clarification on update of state variable VR(UM)	CR		25.322 Rel-6	ASUSTeK		05.03.2: MBMS
	R2-072029	Initiation of state variable VR(UDH) and VR(UDR)	CR		25.322 Rel-6	ASUSTeK		05.03.2: MBMS 05.12: MBMS LCR TDD
agreed	R2-072031	CR to 25.905 V7.0.0 for supporting LCR TDD MBSFN operation 1.28Mcps TDD MBMS physical layer improvements: Addition of	CR	1	25.905 Rel-7	TD Tech Ltd.		Physical layer Enhancements 05.12: MBMS LCR TDD
	R2-072032	DL SF2 and draft CR to 25.331 v7.4.0	CR		25.331 Rel-7	TD Tech Ltd.		Physical layer Enhancements 04.06: Random access
	R2-072033	Message 2 transmission when a dedicated preamble used				Samsung		procedure 04.13: Other LTE stage 2
	R2-072034	First quantification of UL control				Samsung		subjects 04.06: Random access
	R2-072035	Optimization of contentio resolution in aRACH				Samsung		procedure
	R2-072036	UL time synchronized handover				Samsung		04.11.1: Intra LTE
	R2-072037	Gap control in E-UTRAN				Samsung Electronics		04.11.1: Intra LTE
	R2-072038	Measurement Gap and DRX interaction				Samsung Electronics		04.11.1: Intra LTE
	R2-072039	E-UTRA RLC specification work outline				Rapporteur		04.14.4: RLC 04.13: Other LTE stage 2
	R2-072040	PDCP SN and RLC SN				NTT DoCoMo, Inc.		subjects
agreed	R2-072042	Optimization of switching beteween MBMS broadcast TV channels transmitted on ptp bearers (MBMS for Mobile TV)	CR	3001	25.331 Rel-7	NEC, Ericsson	Mr. David Lecompte	05.16: TEI7
	R2-072043	Location of DL PDCP Reordering in LTE during Handover				Fujitsu	Mr. Janne	subjects 04 13: Other LTE stage 2
	R2-072044	Use of Global Cell ID				Ericsson	Peisa Mr. David	subjects
	R2-072045	Support of ROHC and context relocation				NEC	Lecompte	04.11.1: Intra LTE
	D0 070040	UE specific Intra-LTE (interfrequency) and inter-RAT cell						04.13: Other LTE stage 2
	R2-072046	reselection				NEC	Mr David	subjects
	R2-072047	Correction to CTFC for default configuration 12	CR		25.331 Rel-6	NEC	Lecompte	05.03.3: Other 04.06: Random access
	R2-072048	Issues related to RACH access preamble				ASUSTeK		procedure
	B2 072040	Duplication quaidance of colonguladgement information	CD		25 222 Dol 7	Infineen Technologies	Mr. Roland	
	112-072045	Duplication avoidance of acknowledgement mornation	UN		23.322 1.61-7	initiaeon reciniologies	Gruber	04.06: Random access
	R2-072050	Consideration related to Random Access Response				ASUSTeK		procedure
	D2 072051	CTART values in call undets before accurity is enabled	CD		25 221 Dol 6	Infinan	Mr. Roland	05 02 2: Other
	R2-072051	START values in cell update before security is enabled	UK		25.331 Rel-0	IIIIIIeon	Mr Roland	05.03.3. Other
	R2-072052	START values in cell update before security is enabled	CR		Cat A	Infineon	Gruber	05.03.3: Other
	50.070050	Multiplexing option selection in case of	~ ~		25.331 Rel-6		Mr. Roland	
	R2-072053	E_DCH_IRANSMISSION equal FALSE	CR		Cat F 25 331 Rol-7	Infineon	Gruber Mr. Roland	05.03.3: Other
	R2-072054	E DCH TRANSMISSION equal FALSE	CR		Cat A	Infineon	Gruber	05.03.3: Other
								04.13: Other LTE stage 2
	R2-072055	RLC header format				Fujitsu	Ma luka	subjects
	R2-072056	Removing MIMO requirements from MAC-hs	CR		25.321 Rel-7	Nokia Siemens Networks, Nokia	Pirskanen	05.07: MIMO
						Nokia, Nokia Siemens	Mr. Juho	
	R2-072057	Avoid unnecessarily decreasing UE DRX possibility	CR		25.321 Rel-7	Networks	Pirskanen	05.06: CPC
	R2-072058	General update of the 25.308	CR		25.308 Rel-7	Nokia Siemens Network	Mr. Juho	05.16: TEI7
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	R2-072059	Optimization of switching between MBMS broadcast TV channels transmitted on ptp bearers (MBMS for Mobile TV)	CR		25.331 Rel-6	NEC	Mr. David Lecompte	05.03.2: MBMS
	R2-072060	Discussion on Data forwarding options for intra-LTE Handover Consideration on the forwarding strategy in the inter-RAT HO				Alcatel-Lucent, LG Electronics Alcatel-Lucent, LG		04.11.1: Intra LTE
	R2-072061	scenario				Electronics		04.11.2: LTE to/from UTRAN
	R2-072062	The need for uplink enhancement				samsung		
	R2-072063	Proposals on data handling at inter-eNB handover				NTT DoCoMo, Inc.		04.11.1: Intra LTE 04.13: Other LTE stage 2
	R2-072064	RLC PDUs for LTE				NTT DoCoMo, Inc.		subjects
	R2-072065	UE capabilities for Rel-7 Text proposal for RRC chapters: Procedures and Protocol data				Nokia, NSN, Motorola	Mr. Luis Barreto Mr. Himke van	05.16: TEI7
	R2-072066	units Interaction between Quality Reporting on enhanced Cell_FACH				Samsung	der Velde	04.14.2: RRC 05.04: Enhanced
	R2-072067	Problem with the IE 'MBMS service identity' included in the IE				Alcatel-Lucent	Mr. Sven	CELL_FACH state in FDD
	R2-072068	'RAB info' Use of Integrity protection algorithm UIA/2: removal of a 'shall' in	CR		25.331 Rel-6	Ericsson	Ekemark	05.03.2: MBMS
agreed	R2-072069	a note	CR	2992	25.331 Rel-7	ETSI MCC		05.16: TEI7
	R2-072070	Discussion of Access Control Requirements for Home-eNodeB				Vodafone Group		
	R2-072071	Discussion of Mobility Requirements for Home-eNodeB				Vodafone Group		04.02: Itoma traatad in a mail
	R2-072072	Report of email discussion on Home eNodeB Requirements (Point 8)				Vodafone Group		discussion (rapporteur report only) 04.02: Items treated in e-mail discussion (rapporteur report
	R2-072073	Report of Email Discussion on MBMS definitions (Point 3)				Vodafone Group		only) 04.02: Items treated in e-mail
	R2-072074	Report of email discussion on UE State during MBMS Reception (Point 1)				Vodafone Group		discussion (rapporteur report only) 04.13: Other LTE stage 2
	R2-072075	SAE Bearer and SAE Radio Bearer Independence				Vodafone Group		subjects 04.13: Other LTE stage 2
	R2-072076	Network Specific Mandatory Default				Vodafone Group		subjects
	R2-072077	Networks				Mobile		subjects
	R2-072078	RRM framework in the LTE architecture				Vodafone Group, Telecom I KPN	talia, Orange,	04.13: Other LTE stage 2 subjects
	R2-072079	Clarification on HARQ process allocation for MIMO	CR		25.331 Rel-7	ASUSTeK		05.07: MIMO
	R2-072080	UE capabilities				Motorola		04.10: UE capabilities
	R2-072081	Radio Link Failure				Motorola		04.11.1: Intra LTE
	R2-072082	Random Access for LTE MBMS				LG Electronics Inc.		04.12: LTE MBMS
	R2-072083	Random Access for LTE MBMS				LG Electronics Inc. LG Electronics Inc.,		04.12: LTE MBMS 04.06: Random access
	R2-072084	Management of Dedicated Signatures				Samsung		procedure
	R2-072085	Handover procedure for a low activity UE	~ -		05 000 B I -	LG Electronics Inc.		04.11.1: Intra LTE
	R2-072086	MRW Procedure for Special HE Value Configuration	CR		25.322 Rel-7	ASUSTEK	Mr. Sam Jiang	05.16: TEI7 04.13: Other LTE stage 2 subjects
	12-012001	Considerations on NOTIO recuback for E2 design						000,0010

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	P2-072088	LIE Identity Validity in RA Procedure			ASUSTAK		04.06: Random access
	112-012000				1000161		04.06: Random access
	R2-072089	Issues on Random Access Procedure Random and dedicated preamble based RACH access in E-			ASUSTeK		procedure 04.06: Random access
	R2-072090	UTRAN			IPWireless		procedure
	R2-072096	Consideration related to Contention Resolution			ASUSTeK		procedure
	R2-072097	SDU size	LS		CT WG1	Ericsson	Uplink
	R2-072098	(C1-070887, to RAN2). Reply LS (to R2-071097) on RRC connected mode during MBMS enhanced broadcast	LS		CT WG1	Samsung	05.03.2: MBMS
	R2-072099	Evolved HSPA: UE Involved Relocation			Vodafone Group		05.15: Study Item on scope of future FDD HSPA Evolution
	R2-072100	(G2-0/0094, to RAN2). LS on Removal of limitation of SRNC identity	LS		GERAN2	Alcatel-Lucent	05.16: TEI7
	R2-072101	between LTE and GERAN/UTRAN	LS		GERAN	Qualcomm	04.01: Incoming LS on LTE
	R2-072102	Power Control	LS		RAN WG1	Ericsson	04.01: Incoming LS on LTE
	R2-072103	(R1-071838, to RAN2). LS on random access procedure parameters	LS		RAN WG1	Nokia Siemens Networks	04.01: Incoming LS on LTE
	R2-072104	(R1-071839, to RAN2). LS on target quality on L1/L2 control channel	LS		RAN WG1	Samsung	04.01: Incoming LS on LTE
	R2-072105	(R1-071940, to RAN2). LS on Layer-1-related system information	LS		RAN WG1	Alcatel-Lucent	04.01: Incoming LS on LTE
	R2-072106	(GP-070517, to RAN2). Reply LS (S1-070300) on Registration in Densely populated area	15		GERAN	Friesson	05 18 [,] TEI8
	D0 070407	(R1-071238, to RAN2). LS on 64QAM HSDPA and HSDPA	10		DANLWOA		05.07 MIMO
	R2-072107	MIMO UE categories (R1-071249, to RAN2). Reply LS (to R2-070953) on High Bit	LS		RAN WG1	Qualcomm	05.07: MIMO 05.01: Incoming LSs on
	R2-072108	Rate SRB (R3-070499, to RAN2). LS on Clarification on two scenarios	LS		RAN WG1	Alcatel-Lucent Nokia Siemens	UTRA Rel-5
	R2-072109	"Enhanced fromBroadcast over lur" (R3-070700, Cc RAN2), LS on NAS Handling during intra-LTE	LS		RAN WG3	Networks	05.03.2: MBMS
	R2-072110	handover	LS		RAN WG3	Alcatel-Lucent	04.01: Incoming LSs on LTE 05.05: Improved L2 support
	R2-072111	Correction to the maximum number of Mac-d flows on HSDPA.	CR	25.331 Rel-7	Alcatel-Lucent		for high data rates
	R2-072112	(R3-070720, to RAN2). LS on IP multi-cast for S1-AP messages (R3-070729, to RAN2). LS on data forwarding for IRAT	LS		RAN WG3	Ericsson	04.01: Incoming LS on LTE
	R2-072113	Handover (R3-070730 Cc RAN2) Reply LS (to GP-070497) on feasibility	LS		RAN WG3	Samsung	04.01: Incoming LS on LTE
	R2-072114	of GAN enhancements (S2-072217 to BAN2) Reply LS (to B2-071107) on Maximum	LS		RAN WG3	Vodafone	05.18: TEI8 05.03.1: EDD Enhanced
	R2-072115	SDU size (22 072217, 10 KAK2). Reply L3 (10 K2-071107) of Maximum SDU size	LS		SA WG2	Ericsson	Uplink
	R2-072116	update at inter eNodeB mobility	LS		SA WG2	Motorola	04.01: Incoming LS on LTE
	R2-072117	(S2-072275, to RAN2). LS on the need of in sequence data delivery	LS		SA WG2	Motorola	04.01: Incoming LS on LTE
	R2-072119	(S2-0/22/9, to RAN2). Reply LS (to S2-0/2093) on data forwarding for IRAT Handover	LS		SA WG2	Samsung	04.01: Incoming LS on LTE
	R2-072120	(S4-070314, to RAN2). Reply LS (to R2-071104) on Rate- Adaptive Real-time Media	LS		SA WG4	Samsung	04.01: Incoming LS on LTE
	R2-072121	(S3-070280, to RAN2). Reply LS (to R2-071105) on Verification of security principles	LS		SA WG3	Nokia Siemens Networks	04.01: Incoming LS on LTE
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R2-072122	(R1-071834, to RAN2). Reply LS (to R2-071098) on physical layer aspects of enhanced CELL_FACH in FDD	LS		RAN WG1	Nokia Siemens Networks	05.04: Enhanced CELL_FACH state in FDD
R2-072123	(R3-070732, to RAN2). LS on LTE MBMS and PDCP (S2-072224, to RAN2). Reniv LS (to R2-071097) on RRC	LS		RAN WG3	Ericsson	04.01: Incoming LS on LTE
R2-072124	connected mode during MBMS enhanced broadcast (S2-072265, to RAN2). LS on E-UTRAN Idle mode downlink packet buffering and initiation of patwork triggered service	LS		SA WG2	Samsung	05.03.2: MBMS
R2-072125	request	LS		SA WG2	Motorola	04.01: Incoming LS on LTE
R2-072126	(R1-071837, to RAN2). LS on Physical Layer Depadding :-) (S2-072263, Cc RAN2), Reply LS (to GP-070497) on feasibility	LS		RAN WG1	Chairman :-)	04.01: Incoming LS on LTE
R2-072127	of GAN enhancements	LS		SA WG2	Vodafone	05.18: TEI8
R2-072128	(S2-072264, Cc RAN2). Reply LS to GERAN – LTE interworking (S2-072266, Cc RAN2). Reply LS (to RP-071677) on the	LS		SA WG2	Qualcomm	04.01: Incoming LS on LTE
R2-072129	Removal of limitation of SRNC identity	LS		SA WG2	Alcatel-Lucent Mr. Etienne	05.16: TEI7
R2-072130	HS-SCCH Less and Rate Matching 1	CR	25.331 Rel-7	Qualcomm Europe	Chaponnière	05.06: CPC 03: Minutes of the previous
R2-072131	(Draft1) Minutes of RAN2-57bis, Malta, 26-30 March 2007			ETSI MCC		meeting 04.02: Items treated in e-mail discussion (rapporteur report
R2-072132	Report of email discussion point 2: LTE System performance			Ericsson		only) 07: Liaisons and outputs to
R2-072133	Reply LS to SA4 on Rate-Adaptive Real-time Media			T-Mobile		other groups 07: Liaisons and outputs to
R2-072134	Reply LS to SA3 on on Verification of security principles			Qualcomm		other groups 07: Liaisons and outputs to
R2-072135	Reply LS to RAN3 on LS on LTE MBMS and PDCP			Ericsson Verizon Wireless, Nortel		other groups
R2-072136	On the need of fast and robust handover failure recovery			Networks		04.11.1: Intra LTE 04.02: Items treated in e-mail discussion (rapporteur report
R2-072137	Report of Email Discussion on MBMS definitions (Point 3)			Vodafone Group Orange, Alcatel-Lucent,	Mr. Alain	only)
R2-072138	A-GNSS in UTRAN (RRC)	CR	25.331 Rel-7	Nokia	Abinakhoul	05.13: GNSS in UTRAN 04.02: Items treated in e-mail
R2-072139	Report of email discussion on Home eNodeB Requirements (Point 8)			Vodafone Group		discussion (rapporteur report only)
P2 072140	MRMS LIE linking for onhanced breadcast mode			NEC	Mr. David	05 03 2: MPMS
R2-072140	ROHC for E-MBMS			Motorola	Lecompte	04 12: LTE MBMS
112-072141				Wolorola		04.02: Items treated in e-mail discussion (rapporteur report
R2-072142	Home eNodeB definitions			Vodafone Group		only)
R2-072143	(R1-072549, to RAN2). Reply LS on uplink VoIP scheduling			RAN WG1		04.01: Incoming LS on LTE
R2-072144	UE capabilities for Rel-7			Nokia, NSN, Motorola	Mr. Luis Barreto	05.16: TEI7
R2-072145	Correction on 16QAM category	CR	25.331 Rel-7	Alcatel-Lucent		05.08: 16 QAM UL 04.04: Performance
R2-072146	LTE U-plane and C-plane latencies	CR		Ericsson		verification 04.03: Endorsement of latest
R2-072147	Update of Stage 2 Clause 12			Motorola		version of the Stage 2 04.02: Items treated in e-mail
R2-072148	Home eNodeB definitions			Vodafone Group		discussion (rapporteur report

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agreed

								only)
R2-072149	MBMS Notification	CR			25.331 Rel-6	Nokia	Mr. Luis Barreto	05.03.2: MBMS 05.03.1: EDD Enhanced
R2-072150	E-TFC selection clarifications	CR			25.321 Rel-6	Nokia	Provvedi Mr. Simone	Uplink
R2-072151	MBMS Services naming	CR			25.331 Rel-6	Nokia	Provvedi	05.03.2: MBMS 05.03.1: EDD Enhanced
R2-072152	Measurement Reporting criteria IE in ASN.1 Rel-6					Nokia Siemens Networks		Uplink 04.06: Random access
R2-072153	Issues related to RACH access preamble					ASUSTeK		procedure 05.03.1: EDD Enhanced
R2-072154	RLC PDU Size for maximisation of data	CR			25.321/25.322	NEC Orange Alcatel-Lucent	Mr Alain	Uplink
R2-072155	GANSS support to UE capabilities Reply LS to RAN1 on physical layer aspects of enhanced	CR			25. 306 Rel-7	Nokia	Abinakhoul	05.13: GNSS in UTRAN 07: Liaisons and outputs to
R2-072156	CELL_FACH in FDD Measurement reporting, state transitions, and DRX in enhanced					Alcatel-Lucent Nokia Siemens Networks,	Mr. Juho	other groups 05.04: Enhanced
R2-072157	CELL_FACH state	CR	21		25.308	Nokia	Pirskanen Mr. Zhongda	CELL_FACH state in FDD
R2-072158	Consideration on MBMS Required UE action					ZTE	Du Mr. Zhongda	05.03.2: MBMS
R2-072159	MBMS services information on DCCH (R1.072547 to RAN2) Reply IS (to R2-071596) on CELL PCH/U		H opera	tion	in Enhanced	ZTE	Du	05.03.2: MBMS 05.04: Enhanced
R2-072160	CELL_FACH	10(_1 C	off opera			RAN WG1		CELL_FACH state in FDD
R2-072161	and enhanced receivers					Alcatel-Lucent	Mr. Jubo	CELL_FACH state in FDD
R2-072162	Introduction of Enhanced CELL_FACH state in FDD	CR	179	1	25.302	Nokia Friessen Nekia NSN	Pirskanen	CELL_FACH state in FDD
R2-072163	RLC AM	CR			25.322 Rel-7	Samsung	Peisa	05.16: TEI7
R2-072164	Using special value of HE field to indicate end of an SDU for RLC AM	CR			25.331 Rel-7	Ericsson, Nokia, NSN, Samsung	Peisa	05.16: TEI7
R2-072165	Introduction of Improved L2 support for high data rates and Enhanced CELL_FACH state 1.28Mcps TDD MBMS physical layer improvements: Addition of	CR	318	1	25.321 Rel-7	Ericsson, Nokia, NSN	Mr. Janne Peisa	05.04: Enhanced CELL_FACH state in FDD 05.12: MBMS LCR TDD
R2-072166	DL SF2 and draft CR to 25.331 v7.4.0	CR			25.331 Rel-7	TD Tech Ltd.	Mr. Janne	Physical layer Enhancements
R2-072167	Enhanced CELL_FACH state	CR	318	2	25.321 Rel-7	Ericsson, Nokia, NSN Nokia Siemens Networks	Peisa Mr. Jubo	CELL_FACH state in FDD
R2-072168	and CELL_PCH	CR	3003		25.331 Rel-7	Nokia Nokia	Pirskanen Mr. Jubo	CELL_FACH state in FDD
R2-072169	Introduction of two DRX schemes in CELL_PCH and URA_PCH	CR	3004		25.331 Rel-7	Nokia	Pirskanen Mr. Zhongda	CELL_FACH state in FDD
R2-072170	Minor correction on MBMS text	CR			25.331 Rel-6	ZTE	Du	05.03.2: MBMS
R2-072171	Correction on handling MRW procedure failure case (R4-070778, Cc RAN2), Reply LS (to R1-071250) on LTE	CR			25.322 Rel-7	ASUSTeK		05.16: TEI7
R2-072172	measurements supporting mobility					RAN WG4		04.01: Incoming LS on LTE 07: Liaison and output to
R2-072173	LS to RAN1 on Quality reporting					LG Electronics	Mr. David	other groups
R2-072174	MBMS UE linking for enhanced broadcast mode					NEC	Lecompte	05.03.2: MBMS 05.11: MBMS TDD Physical
R2-072175	Support for DL only SFN operation for MBMS FDD	CR			25.346 Rel-7	Ericsson		layer Enhancements

	R2-072176	Support for DL only SFN operation for MBMS FDD	CR			25.331 Rel-7	Ericsson		05.11: MBMS TDD Physical layer Enhancements 05.11: MBMS TDD Physical
	R2-072177	Support for DL only SFN operation for MBMS FDD	CR			25.306 Rel-7	Ericsson	Mr. Zhonada	layer Enhancements
	R2-072178	consideration on handover interruption time					ZTE	Du	04.11.1: Intra LTE
	R2-072179	Improvements					LG Electronics		other groups 05.10: MBMS FDD Physical
	R2-072180	MBMS FDD and TDD Physical Layer Improvements	CR			25.304 Rel-7	LG Eletcronics Inc., IP Wireless., IPMobile, UTStarcom	Mr. Patrick Fischer	MBMS TDD Physical layer Enhancements, 4.4: Performance verification 05.10: MBMS FDD Physical layer Enhancements, 05.11:
	R2-072181	MBMS FDD and TDD Physical Layer Improvements	CR			25.306 Rel-7	LG Eletcronics Inc., IP Wireless., IPMobile, UTStarcom	Mr. Patrick Fischer	MBMS TDD Physical layer Enhancements, 2: Approval of the agenda
	R2-072182	DRAFT CR to TS 25.331 [Rel-7] on Introducing 16QAM uplink support	CR	2982	4		QUALCOMM Europe	Dr. Nathan Tenny	05.08: 16 QAM UL 07: Liaison and output to
	R2-072183	LS on System Information Broadcast					Samsung		other groups
	R2-072184								
	R2-072186	LS to RAN1 on System Information Broadcast					Samsung		07: Liaison and output to other groups
	R2-072187	LS to RAN on latency analysis					Ericsson		off: Liaison and output to other groups
approved LS approved	R2-072188	LS on neighbour cell lists and reading neighbour cell P-BCH					NTT DoCoMo, Inc.		07: Liaison and output to other groups 07: Liaisons and outputs to
LS	R2-072189	Reply LS to SA4 on Rate-Adaptive Real-time Media					T-Mobile		other groups
approved	R2-072190	Reply LS to SA3 on on Verification of security principles					Qualcomm		other groups 07: Liaisons and outputs to
LS	R2-072191	Reply LS to SA3 on on Verification of security principles					Qualcomm		other groups
approved	R2-072192	UE Capability principles					Ericsson		04.10: UE capabilities 07: Liaison and output to
LS approved	R2-072193	LS to RAN on latency analysis					Ericsson		other groups 07: Liaisons and outputs to
LS	R2-072194	Reply LS to RAN3 on LS on LTE MBMS and PDCP					Ericsson		other groups
	D0 070405		05			05 004 D.1.7	LG Eletcronics Inc., IP Wireless., IPMobile,	Mr. Patrick	layer Enhancements, 05.11: MBMS TDD Physical layer
	R2-072195 R2-072196	MBMS FDD and TDD Physical Layer Improvements	CR			25.331, Rel-7	UIStarcom Alcatel-Lucent	Fischer	Ennancements
	R2-072190	Solution to reordering issue in Enhanced Cell_FACH					InterDigital		05.04: Enhanced CELL_FACH state in FDD
	R2-072198	Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25 346	CR			25 346 Rel-7	RITT, CMCC, CATT, TD- Tech, ZTE, Spreadtrum Communications	Mrs. Haiyang Quan	05.12: MBMS LCR TDD Physical layer Enhancements
	R2-072199	Introduce MBMS LCR TDD Physical Layer Enhancement to TS 25 304	CR			25 304 Rel-7	RITT, CMCC, CATT, TD-	Mrs. Haiyang	05.12: MBMS LCR TDD Physical layer Enhancements
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		-					Communications		
							RITT, CMCC, CATT, TD-		
		Introduce MBMS LCR TDD Physical Layer Enhancement to TS					Tech, ZTE, Spreadtrum	Mrs. Haiyang	05.12: MBMS LCR TDD
	R2-072200	25.331	CR			25.331 Rel-7	Communications	Quan	Physical layer Enhancements
		Introduce MRMS I CR TDD Physical Layor Enhancement to TR					RITT, CMCC, CATT, TD-	Mrs. Haiyang	
agreed	R2-072201	25.905	CR	2		25.905 Rel-7	Communications	Quan	Physical laver Enhancements
5		Removing an incomplete optimization for RLC operations during					Ericsson, LG Electronics,		,,.
	R2-072202	HSDPA cell change	CR	306		25.322 Rel-7	Samsung		05.16: TEI7
	R2-072203	Removing an incomplete optimization for RLC operations during HSDPA cell change	CR			25 321 Rel-7	Samsung		05 16 [.] TEI7
		Removing an incomplete optimization for RLC operations during	0.1			20.02111011	Ericsson, LG Electronics,		
	R2-072204	HSDPA cell change	CR			25.308 Rel-7	Samsung		05.16: TEI7
	R2-072205	System information structure (with TP)					Sameuna	Mr. Himke van	04.05: System Information
	112 012200						oumoung	Mr. Himke van	content & derivery
	R2-072206	Text proposal for RRC chapter: General					Samsung	der Velde	04.14.2: RRC
	B2 072207	Text proposal for RRC chapter: Procedures and Protocol data					Samaung	Mr. Himke van	04 14 2: 880
	R2-072207	Correction to the Introduction of Improved L2 support for high					Samsung	Mr. Janne	05.05: Improved L2 support
	R2-072208	data rates	CR			25.301 Rel-7	Ericsson	Peisa	for high data rates
	D0 070000						Nokia Siemens Networks, N	lokia, Ericsson,	05.04: Enhanced
	R2-072209	Text Proposal for Paging in Enhanced CELL_FACH					Quaicomm Nokia Siemens Networks		05.04: Enhanced
	R2-072210	UE capabilities for Enhanced CELL_FACH	CR			25.306 Rel-7	Nokia		CELL_FACH state in FDD
	D0.070044		00			05 000 D 1 7	F	Mr. Janne	05.05: Improved L2 support
	R2-072211	Introduction of Improved L2 support for high data rates	CR	309		25.322 Rel-7	Ericsson	Peisa Mr. Janne	for high data rates
	R2-072212	Introduction of Improved L2 support for high data rates	CR			25.331 Rel-7	Ericsson	Peisa	for high data rates
			~ ~				RITT, CMCC, CATT, TD-Te	ch, ZTE,	05.12: MBMS LCR TDD
	R2-072213		CR			25.331 Rel-7	Spreadtrum Communication	Nr Simone	05.03.1: EDD Enhanced
	R2-072214	E-TFC selection clarifications	CR			25.321 Rel-6	Nokia	Provvedi	Uplink
approved									07: Liaison and output to
LS	R2-072215	Reply LS to SA2 on feasibility of GAN enhancements				I-Mobile	Nokia Siemens Networks	Mr. Juho	other groups 05.04: Enhanced
agreed	R2-072216	Introduction of Enhanced CELL FACH state in FDD	CR	84	1	25.301	Nokia	Pirskanen	CELL FACH state in FDD
	50.0500/5		~ ~				QUALCOMM Europe,	Dr. Nathan	-
	R2-072217	Proposed CR to TS 25.331 [Rel-7] on Change of UE capability	CR			25.331 Rel-7	Nokia	Lenny Mr. Richard	05.16: TEI7
agreed	R2-072218	MBMS Scheduling Information	CR	3005		25.331 Rel-6	Motorola	Burbidge	05.03.2: MBMS
	50.0700/0		~ ~	~~				Mr. Richard	
agreed	R2-072219	MSCH transmission - alignment to stage 3	CR	28		25.346 Rel-6	Motorola	Burbidge Mr. Zhonada	05.03.2: MBMS
agreed	R2-072220	Minor correction on MBMS text	CR	3006		25.331 Rel-6	ZTE	Du	05.03.2: MBMS
	D0 070004		00	0007		05 004 5 1 0	F	Mr. Janne	
agreed	R2-072221	Maintenance of PMM connection for MBMS PTP reception	CR	3007		25.331 Rel-6	Ericsson	Peisa	05.03.2: MBMS
	R2-072222	Initial version of LTE RRC specification					Samsung	Mr. Janne	04.14.2: RRC
agreed	R2-072223	Maintenance of PMM connection for MBMS PTP reception	CR	3008		25.331 Rel-7	Ericsson	Peisa	05.03.2: MBMS
		Correction to the Introduction of Improved L2 support for high	~ ~					Mr. Janne	05.05: Improved L2 support
agreed	R2-072224	data rates	CR	85		25.301 Rel-7	Crange Alcatel-Lucont	Peisa Mr. Alain	tor high data rates
	R2-072225	A-GNSS in UTRAN (RRC)	CR			25.331 Rel-7	Nokia	Abinakhoul	05.13: GNSS in UTRAN
			-						

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	R2-072226	Introduction of E-TFC Selection for 1.28Mcps TDD	CR		25.321 Rel-7	ZTE, CATT, TD TECH	Mr. Janno	05.14: 1.28 Mcps TDD Enhanced Uplink
	R2-072227	Clarification on E-DCH Scheduled Grant Payload Calculation	CR		25.321 Rel-6	Ericsson	Peisa	Uplink 07: Liaison and output to
	R2-072228	P-BCH				NTT DoCoMo, Inc.	Dr. Nathan	other groups
	R2-072229	HSPA VoIP Service Continuity in Rel-7				QUALCOMM Europe	Tenny Mr. Janne	05.16: TEI7
agreed	R2-072230	Content of MSI message when sent on DCCH	CR	3009	25.331 Rel-6	Ericsson	Peisa Mr. Janne	05.03.2: MBMS
agreed	R2-072231	Content of MSI message when sent on DCCH Relative ordering of MBMS Selected Services when indicated to	CR	3010	25.331 Rel-7	Ericsson	Peisa Mr. Janne	05.03.2: MBMS
agreed	R2-072232	the network Relative ordering of MBMS Selected Services when indicated to	CR	3011	25.331 Rel-6	Ericsson	Peisa Mr. Janne	05.03.2: MBMS
agreed	R2-072233	the network	CR	3012	25.331 Rel-7	Ericsson	Peisa Mr. Janne	05.03.2: MBMS
agreed	R2-072234	Background scan during MBMS PTM reception Default MBMS activation time and 'MBMS all unmodified p-t-m	CR	3013	25.331 Rel-7	Ericsson	Peisa Mr. Simone	05.03.2: MBMS
agreed	R2-072235	services' Default MBMS activation time and 'MBMS all unmodified p-t-m	CR	3014	25.331 Rel-6	Nokia	Provvedi Mr. Simone	05.03.2: MBMS
agreed	R2-072236	services' Optimization of switching between MBMS broadcast TV	CR	3015	25.331 Rel-7	Nokia	Provvedi Mr. David	05.03.2: MBMS
	R2-072237	channels transmitted on ptp bearers (MBMS for Mobile TV) Problem with the IE 'MBMS service identity' included in the IE	CR		25.331 Rel-6	NEC	Lecompte Mr. Sven	05.03.2: MBMS
agreed	R2-072238	'RAB info' Problem with the IE 'MBMS service identity' included in the IE	CR	3016	25.331 Rel-6	Ericsson	Ekemark Mr. Sven	05.03.2: MBMS
agreed	R2-072239	'RAB info'	CR	3017	25.331 Rel-7	Ericsson	Ekemark Mr. Juho	05.03.2: MBMS
	R2-072240	Removing the limitation of SRNC identity size Consequences of implementation/non-implementation of MBMS	CR		25.331	Nokia Siemens Networks	Pirskanen	05.16: TEI7
	R2-072241	Notification CR Reply LS to RAN3 on Clarification on two scenarios "Enhanced				Nokia		05.03.2: MBMS 07: Liaison and output to
	R2-072242	fromBroadcast over lur"				Alcatel-Lucent		other groups 07: Liaison and output to
	R2-072243	Proposed LS to SA2, SA3 on Service Request for LTE/SAE Addition of RAB combinaison for SRB mapped on DL "HSDPA +				Alcatel-Lucent		other groups
	R2-072244	DCH"	CR	94	25.993 Rel-6	Alcatel-Lucent Nokia, Nokia Siemens		05.03: Release 6 corrections
agreed	R2-072245	RoHC Compression Status	CR	157	25.306 Rel-6	Networks Nokia, Nokia Siemens		05.03: Release 6 corrections
agreed	R2-072246	RoHC Compression Status	CR	158	25.306 Rel-7	Networks	Mr. David	05.03: Release 6 corrections
agreed	R2-072247	Correction of SRB delay	CR	3018	25.331 Rel-6	NEC	Lecompte Mr. David	05.03.3: Other
agreed	R2-072248	Correction of SRB delay Update of normative references for Robust Header Compression	CR	3019	25.331 Rel-7	NEC	Lecompte Mr. Janne	05.03.3: Other
agreed	R2-072249	(RFC3095) Update of normative references for Robust Header Compression	CR	303	25.323 Rel-6	Ericsson	Peisa Mr. Janne	05.03.3: Other
agreed	R2-072250	(RFC3095)	CR	304	25.323 Rel-7	Ericsson	Peisa Mr. Janne	05.03.3: Other
agreed	R2-072251	Incorrect reference to 25.993 for default configuration 17	CR	3020	25.331 Rel-6	Ericsson	Peisa Mr. Janne	05.03.3: Other
agreed	R2-072252	Incorrect reference to 25.993 for default configuration 17	CR	3021	25.331 Rel-7	Ericsson	Peisa	05.03.3: Other
agreed	R2-072253	Removal of redundant IE 'MBMS-PreferredFreqRequest-r6'	CR	3022	25.331 Rel-7	Ericsson	Mr. Janne	05.03.3: Other
				121				

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								Mr. David	
agreed	R2-072254	Correction to CTFC for default configuration 12	CR	3023		25.331 Rel-6	NEC	Lecompte Mr. David	05.03.3: Other
agreed	R2-072255	Correction to CTFC for default configuration 12	CR	3024		25.331 Rel-7	NEC	Lecompte	05.03.3: Other
							LG Electronics	Mr. Patrick	
	R2-072256	Updated PDCP skeleton specification					(rapporteur)	Fischer	04.14.3: PDCP
	R2-072257	and CELL_PCH	CR	3003	1	25 331 Rel-7	Nokia	Pirskanen	CELL EACH state in EDD
	112 07 2207	Introduction of Improved L2 support for high data rates and	OIT	0000	•	20.00111017	Hokid	Mr. Janne	05.04: Enhanced
agreed	R2-072258	Enhanced CELL_FACH state	CR	318	3	25.321 Rel-7	Ericsson, Nokia, NSN	Peisa	CELL_FACH state in FDD
			~ -					Mr. Janne	05.05: Improved L2 support
	R2-072259	Introduction of Improved L2 support for high data rates	CR	3025		25.331 Rel-7	Ericsson	Peisa Mr. Janne	for high data rates
	R2-072260	Introduction of Improved L2 support for high data rates	CR	309	1	25.322 Rel-7	Ericsson	Peisa	for high data rates
		Measurement reporting, state transitions, and DRX in enhanced					Nokia Siemens Networks,	Mr. Juho	05.04: Enhanced
agreeed	R2-072261	CELL_FACH state	CR	21	1	25.308	Nokia	Pirskanen	CELL_FACH state in FDD
	D0 070000		00	0004		05 004 0 1 7	Nokia Siemens Networks,	Mr. Juho	05.04: Enhanced
agreed	R2-072262	Introduction of two DRX schemes in CELL_PCH and URA_PCH	CR	3004	1	25.331 Rel-7	Nokia	Pirskanen	05 10: MBMS EDD Physical
									laver Enhancements, 05.11:
							LG Eletcronics Inc., IP		MBMS TDD Physical layer
							Wireless., IPMobile,	Mr. Patrick	Enhancements, 4.4:
agreed	R2-072263	MBMS FDD and TDD Physical Layer Improvements	CR	159		25.304 Rel-7	UTStarcom	Fischer	Performance verification
									laver Enhancements 05 11
							LG Eletcronics Inc., IP		MBMS TDD Physical layer
							Wireless., IPMobile,	Mr. Patrick	Enhancements, 2: Approval
agreed	R2-072264	MBMS FDD and TDD Physical Layer Improvements	CR	159		25.306 Rel-7	UTStarcom	Fischer	of the agenda
							LC Eleteranica Inc. ID		05.10: MBMS FDD Physical
							Wireless IPMobile	Mr. Patrick	MBMS TDD Physical laver
agreed	R2-072265	MBMS FDD and TDD Physical Layer Improvements	CR	3026		25.331 Rel-7	UTStarcom	Fischer	Enhancements
agreed	R2-072266	Corrections on modulus base in UM in RLC	CR	310		25.322 Rel-6	ASUSTeK		05.03.2: MBMS
agreed	R2-072267	Corrections on modulus base in UM in RLC	CR	311		25.322 Rel-7	ASUSTeK		05.03.2: MBMS
approved	D0 070000	LS on Introduction of Additional DCH RAB Combinations into							07: Liaison and output to
LS Technically	R2-072268	25.993					Nokia Siemens Networks		other groups
endorsed	R2-072269	Additional DCH RAB Combinations	CR	95		25.993 Rel-7	T-Mobile		05.16: TEI7
							Nokia Siemens Networks,		
agreed	R2-072270	HSPA RAB Combinations	CR	96		25.993 Rel-7	T-Mobile		05.16: TEI7
agreed	R2-072271	Additional HSPA RAB Combinations	CR	97		25.993 Rel-7	Nokia Siemens Networks		05.16: TEI7
	R2-072272	TP for LC Prioritisation					Qualcomm, Ericsson		04.14.1: MAC
	R2-072273	Outline of MAC specification					Qualcomm, Ericsson		04.14.1: MAC
	D2 072274	MBMS Agroomonts					Nokia, Nokia Siemens	Mr. Benoist	04 12:1 TE MRMS
	112-072274	Removing an incomplete optimization for RLC operations during					Ericsson, LG Electronics.	Sebile	04.12. LTL MBM3
agreed	R2-072275	HSDPA cell change	CR	306	1	25.322 Rel-7	Samsung		05.16: TEI7
		Removing an incomplete optimization for RLC operations during	~ -			as ag	Ericsson, LG Electronics,		AE 40 TE17
agreed	R2-072276	HSDPA cell change Removing an incomplete estimization for PLC exercises during	CR	319		25.321 Rel-7	Samsung		05.16: TEI7
agreed	R2-072277	HSDPA cell change	CR	22		25.308 Rel-7	Samsung		05.16: TEI7

Peisa

agreed	R2-072278	Introduction of Wait time to Cell Update Confirm	CR	3027		25.331 <u>Rel-7</u>	Nokia Siemens Networks, Nokia	Mr. Juho Pirskanen	05.16: TEI7
agreed	R2-072279	Removing the limitation of SRNC identity size	CR	3028		25.331 <u>Rel-7</u>	Nokia Siemens Networks	Pirskanen	05.16: TEI7
agreed	R2-072280	RLC AM	CR	312		25.322 Rel-7	Samsung	Peisa	05.16: TEI7
email agreement	R2-072281	Using special value of HE field to indicate end of an SDU for RLC AM	CR	3029		25.331 Rel-7	Ericsson, Nokia, NSN, Samsung	Mr. Janne Peisa	05.16: TEI7
agreement	R2-072282	T305 timer in RRC container at SRNS relocation	CR	3030		25.331 Rel-7	huawei	Ma Etianaa	05.16: TEI7
agreed	R2-072283	Introduction of enhanced F-DPCH	CR	3031		25.331 Rel-7	Qualcomm Europe	Chaponnière	05.16: TEI7
agreed	R2-072284	Introducing 16QAM uplink support	CR	2982	5		QUALCOMM Europe	Tenny	05.08: 16 QAM UL
agreed email	R2-072285	Introducing 16QAM uplink support	CR	311	2	25.321 Rel-7	QUALCOMM Europe	Mr Alain	05.08: 16 QAM UL
agreement	R2-072286	A-GNSS in UTRAN (RRC)	CR	3032		25.331 Rel-7	Nokia Orange, Alcatel-Lucent,	Abinakhoul Mr. Alain	05.13: GNSS in UTRAN
agreed	R2-072287	GANSS support to UE capabilities	CR	160		25. 306 Rel-7	Nokia	Abinakhoul	05.13: GNSS in UTRAN 05.03.1: FDD Enhanced
agreed	R2-072288	RLC PDU Size for maximisation of data	CR	320		25.321 Rel-6	NEC		Uplink
agreed email	R2-072289	Introducing 16QAM uplink support	CR	151	2	25.306 Rel-7	QUALCOMM Europe		05.08: 16 QAM UL
agreement	R2-072290	MBMS Notification	CR	3033		25.331 Rel-6	Ericsson Samsung Ericsson	Mr. Gert-Ian	05.03.2: MBMS
LS	R2-072291	LS to RAN on Release-7 dependencies					Motorola, Nokia, NSN	van Lieshout	05: UTRA/UTRAN
agreed	R2-072292	DCH"	CR	94	1	25.993 Rel-7	Alcatel-Lucent		05.03: Release 6 corrections 05.14: 1.28 Mcps TDD
agreed	R2-072293	Clarification for control of E-RUCCH transmission in LCR TDD	CR	321		25.321 Rel-7	ZTE, CATT, TD TECH		Enhanced Uplink
agreed	R2-072294	mode	CR	3034		25.331 Rel-7	ZTE, CATT	Mrs. Haiyang	Enhanced Uplink
agreed	R2-072295	TDD	CR	3035		25.331 Rel-7	CATT, TD-Tech, ZTE	Quan Mrs Haiyang	Enhanced Uplink
agreed	R2-072296	Some Small Editorial Corrections to TS 25.321	CR	322		25.321 Rel-7	CATT	Quan	Enhanced Uplink
agreed	R2-072297	triggering E-DCH serving cell change in LCR TDD system Some clarifications related to E-DCH Scheduling Information in	CR	3036		25.331 Rel-7	ZTE, CATT		Enhanced Uplink
agreed	R2-072298	TDD mode	CR	324		25.321 Rel-7	ZTE, CATT	Mrs. Haiyang	Enhanced Uplink
agreed	R2-072299	Some corrections for LCR TDD EUL to TR 30.302	CR	1		30.302 Rel-7	CATT, TD-Tech, ZTE	Quan Mrs. Haiyang	Enhanced Uplink
agreed	R2-072300	Correction to definition of maxNumE-AGCH for TDD	CR	3037		25.331 Rel-7	CATT, IPWireless	Quan	Enhanced Uplink
agreed	R2-072301	Introduction of E-TFC Selection for 1.28Mcps TDD Correction to definition of Power Resource Related Information	CR	323		25.321 Rel-7	ZTE, CATT, TD TECH		Enhanced Uplink
agreed	R2-072302	(TDD only)	CR	3038		25.331 Rel-7	IPWireless, CATT		05.16: TEI7
	R2-072303	(R3-071174, to RAN2). LS on RAN WG3 updates to 36.300					RAN WG3	Dr. Nether	04.01: Incoming LS on LTE
agreed	R2-072304	Introducing 16QAM uplink support	CR	2982	6		QUALCOMM Europe	Dr. Natnan Tenny	05.08: 16 QAM UL
agreed	R2-072305	and CELL_PCH	CR	3003	2	25.331 Rel-7	Nokia Siemens Networks, Nokia	Pirskanen	CELL_FACH state in FDD

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agreed	R2-072306	UE capabilities for Enhanced CELL_FACH	CR	161		25.306 Rel-7	Nokia Siemens Networks, Nokia		05.04: Enhanced CELL_FACH state in FDD
agreed	R2-072307	Introduction of Improved L2 support for high data rates	CR	3025	1	25.331 Rel-7	Ericsson	Mr. Janne Peisa	05.05: Improved L2 support for high data rates
agreed	R2-072308	Introduction of Improved L2 support for high data rates	CR	309	2	25.322 Rel-7	Ericsson	Mr. Janne Peisa	05.05: Improved L2 support for high data rates
	R2-072309	User Plane Data Handling at Handover					Nokia, Nokia Siemens Networks	Mr. Benoist Sébire	04.11.1: Intra LTE
approved LS	R2-072310	LS to SA2, SA3 on Service Request for LTE/SAE					Alcatel-Lucent		other groups
	R2-072311	UE procedures in idle mode for LTE: Text proposal					Networks		reselection
	R2-072312	EUTRA RLC Specification					NTT DoCoMo, Inc.		04.14.4: RLC 05.10: MBMS FDD Physical
agreed	R2-072313	MBMS FDD and TDD Physical Layer Improvements	CR	27	4	25.346 Rel-7	, LG Eletcronics Inc., IP Wireless., IPMobile, UTStarcom	Mr. Patrick Fischer	layer Enhancements, 05.11: MBMS TDD Physical layer Enhancements
	R2-072314	MBMS Agreements					Nokia, Nokia Siemens Networks, Samsung	Mr. Benoist Sébire	04.12: LTE MBMS
	R2-072315	LS to RAN1 on MBMS FDD and TDD Physical Layer Improvements					LG Electronics		07: Liaison and output to other groups
	R2-072316	LS on user plane handling for LTE					NEC		07: Liaison and output to other groups
content agreed	R2-072317	MBMS Agreements					Nokia, Nokia Siemens Networks, Samsung	Mr. Benoist Sébire	04.12: LTE MBMS
	R2-072318	LS to RAN1 on Quality reporting					LG Electronics		07: Liaison and output to other groups
	R2-072319	Support for DL only SFN operation for MBMS FDD	CR			25.346 Rel-7	Ericsson		layer Enhancements
	R2-072320	Support for DL only SFN operation for MBMS FDD	CR			25.331 Rel-7	Ericsson		layer Enhancements
approved	R2-072321	Support for DL only SFN operation for MBMS FDD Reniv LS to RAN3 on Clarification on two scenarios "Enhanced	CR			25.306 Rel-7	Ericsson		layer Enhancements
LS	R2-072322	fromBroadcast over lur"					Alcatel-Lucent	Mr. Richard	other groups
agreed	R2-072323	MBMS Scheduling Information	CR	3039		25.331 Rel-7	Motorola CATT, Elektrobit, Ericsson, Fujitsu, ITRI, LGE, Mitsubishi, Nokia,	Burbidge	05.03.2: MBMS
	R2-072324	Text Proposal for UL Scheduling					Nokia Siemens Networks, NTT DoCoMo, Samsung	Mr. Benoist Sébire	
	R2-072325	System information structure (with TP)					Samsung	Mr. Himke van der Velde	04.05: System Information content & delivery
LS	R2-072326	LS on user plane handling for LTE					NEC	Ma. 1	of: Liaison and output to other groups
agreement	R2-072327	Clarification on E-DCH Scheduled Grant Payload Calculation	CR	325		25.321 Rel-6	Ericsson	Peisa	Uplink
agreement	R2-072328	Clarification on E-DCH Scheduled Grant Payload Calculation	CR	326		25.321 Rel-7	Ericsson	Peisa	Uplink 05.03.1: EDD Enhanced
agreed	R2-072329	RLC PDU Size for maximisation of data	CR	327		25.321 Rel-7	NEC		Uplink
agreement	R2-072330	MBMS Notification	CR	3040		25.331 Rel-7	Ericsson		05.03.2: MBMS

		5						
agreed	R2-072331	Minor correction on MBMS text	CR	3041	25.331 Rel-7	ZTE	Mr. Zhongda Du	05.03.2: MBMS
agreed	R2-072332	MSCH transmission - alignment to stage 3 Changes to management-, handover-, paging- and NAS functions pade and NAMS context surprised and NAS	CR	0029	25.346 Rel-6	Motorola	Mr. Richard Burbidge	05.03.2: MBMS
agreed	R2-072333	protocol stack, and X2 inter cell load management	CR	0001	36.300 Rel-8	RAN WG3		04: LTE
approved LS	R2-072334	LS to RAN1 on Quality reporting				RAN2		07: Liaison and output to other groups
approved LS	R2-072335	Reply LS to RAN1 on physical layer aspects of enhanced CELL_FACH in FDD				RAN2		07: Liaisons and outputs to other groups
approved LS	R2-072336	LS to SA4 on Physical layer enhancements for MBMS				RAN2		07: Liaison and output to other groups
email agreement	R2-072337	Independence versus coupling of UL/DL bit rate capability in LTE				Qualcomm Huawei		04.09: UE Capabilities
email	D 0 070000	Update on Mobility, Security, MBMS, Random	~ ~					
agreement	R2-072338	Access Procedure, etc	CR	0002	36.300 Rel-8	Nokia Siemens Networks		04: LIE

Annex C: list of agreed CRs (please check)

<u>agreed</u> email							Ericsson, Nokia, N <u>okia</u> S <u>iemens Networks</u> ,
agreement	R2-072281	Using special value of HE field to indicate end of an SDU for RLC AM	CR	3029		25.331 Rel-7	Samsung
agree <u>dment</u>	2282	T305 timer in RRC container at SRNS relocation	CR	3030	<u>1</u>	25.331 Rel-7	huawei
email	R2-07 <u>2341</u>			2022	4	05 004 Del 7	Orange, Alcatel-Lucent,
agreement email	R2-072340	A-GNSS III UTRAN (RRC)	υĸ	3032	1	25.551 Rel-7	Nokia, SIRF, Global Locale
agree <u>dment</u>	2290	MBMS Notification	CR	3033	1	25.331 Rel-6	Ericsson
email		Clarification on calculation of "Scheduled Grant Payload" E-DCH Scheduled					
agree <u>dment</u>	R2-072327	Grant Payload Calculation	CR	325		25.321 Rel-6	Ericsson
agreedment	R2-072328	Grant Payload Calculation	CR	326		25.321 Rel-7	Ericsson
							<u>Nokia, Nokia Siemens</u> <u>Networks, Ericsson,</u> <u>Motorola, Qualcomm,</u>
email	50.070000		0.5	0040		05 004 5 1 7	Vodafone, Infineon
agree <u>a</u> ment email	R2-072330	MBMS Notification	CR	3040		25.331 Rel-7	<u>Technologies</u> ⊭ricsson
agreement	R2-072337	Independence versus coupling of UL/DL bit rate capability in LTE					Huawei
agreed	R2-071623	"Maximum_Serving_Grant" setting at TTI change	CR	317		25.321 Rel-7	Panasonic
agreed	R2-071632	RRC Cellid encoding alignment on RANAP	CR	2993		25.331 Rel-7	Alcatel-Lucent
agreed	R2-071638	Alignment of tabular to ASN.1 for SIB11/SIB12 and event 1J	CR	3002		25.331 Rel-7	NEC
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agreed	R2-071639	PDCP reinitialisation at SRNS relocation	CR	302		25.323 Rel-7	Alcatel-Lucent
agreed	R2-071640	Correction toof Out of Sequence Reception function	CR	307		25.322 Rel-7	NEC
agreed	R2-071680	Signalling connection release at T314/315 expiry	CR	2994		25.331 Rel-7	Motorola
agreed	R2-071682	Cell Update Confirm with RLC re-establish indicator	CR	2995		25.331 Rel-7	Motorola
							Nokia Siemens Networks,
agreed	R2-071691	Introduction of HS-DSCH operation in CELL_FACH state	CR	156		25.304	Nokia
							LG Electronics Inc.,
agreed	R2-071760	CR0308 to 25.322 DAR over CCCH	CR	308		25.322 Rel-7	SAMSUNG
agreed	R2-071862	S-CCPCH and PCH channel selection for Band IV or Band IX or Band X	CR	157		25.304 Rel-7	Nokia Siemens Networks
agreed	R2-071866	Initialisation of CFN calculation for CELL_FACH	CR	2999		25.331 Rel-7	Nokia Siemens Networks
agreed	R2-071868	Feature Clean Up leftover: Removal of DRAC leftover	CR	2998		25.331 Rel7	Nokia Siemens Networks
agreed	R2-071898	Correction of STTD Indicator for F-DPCH Tx Diversity	CR	2996		25.331 Rel-7	Ericsson
agreed	R2-071899	Introduction of GAN PS handover	CR	156		25.306 Rel-7	Ericsson
agreed	R2-071900	Introduction of GAN PS handover	CR	2997		25.331 Rel-7	Ericsson
							Nokia, 3, Ericsson, Motorola,
agreed	R2-071933	PLMN selection ping-pong control	CR	3000		25.331 Rel-7	NSN
							Nokia, 3, Ericsson, Motorola,
agreed	R2-071934	PLMN selection ping-pong control	CR	158		25.304 Rel-7	Nokia Siemens Networks
							RIT, CMCC, ID Tech,
							CATT, ZTE corporation,
		1.29Mone TDD MPMS physical layer improvements related changes CP to					Spreadtrum CommunicationsTD Tools
agreed	R2-072031	25 905 V7 0.0 for supporting LCR TDD MBSEN operation	CR	1		25 905 Rol-7	Ltd
agreed	112-072001	Optimization of switching beteween MBMS broadcast TV channels	OIX	1		20.000 100-7	Etd.
agreed	R2-072042	transmitted on ptp bearers (MBMS for Mobile TV)	CR	3001		25 331 Rel-7	NEC Ericsson
agreed	R2-072069	Use of Integrity protection algorithm UIA/2: removal of a 'shall' in a note	CR	2992		25 331 Rel-7	FTSI MCC
agrood			0	2002		20100111011	Nokia Siemens Networks.
agreed	R2-072162	Introduction of Enhanced CELL FACH state in FDD	CR	179	1	25.302	Nokia
0		-					RITT, CMCC, CATT, TD-
							Tech, ZTE, Spreadtrum
agreed	R2-072201	Introduce MBMS LCR TDD Physical Layer Enhancement to TR 25.905	CR	2		25.905 Rel-7	Communications
							Nokia Siemens Networks,
agreed	R2-072216	Introduction of Enhanced CELL_FACH state in FDD	CR	84	1	25.301	Nokia
agreed	R2-072218	MBMS Scheduling Information	CR	3005		25.331 Rel-6	Motorola
agreed	R2-072219	MSCH transmission - alignment to stage 3	CR	28		25.346 Rel-6	Motorola
agreed	R2-072220	Minor correction on MBMS-text	CR	3006		25.331 Rel-6	ZTE <u>, Ericsson</u>
agreed	R2-072221	Maintenance of PMM connection for MBMS PTP reception	CR	3007		25.331 Rel-6	Ericsson
agreed	R2-072223	Maintenance of PMM connection for MBMS PTP reception	CR	3008		25.331 Rel-7	Ericsson
agreed	R2-072224	Correction to the Introduction of Improved L2 support for high data rates	CR	85		25.301 Rel-7	Ericsson
agreed	R2-072230	Content of MSI message when sent on DCCH	CR	3009		25.331 Rel-6	Ericsson
agreed	R2-072231	Content of MSI message when sent on DCCH	CR	3010		25.331 Rel-7	Ericsson
agreed	R2-072232	Relative ordering of MBMS Selected Services when indicated to the network	CR	3011		25.331 Rel-6	Ericsson
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agreed	R2-072233	Relative ordering of MBMS Selected Services when indicated to the network	CR	3012		25.331 Rel-7	Ericsson
agreed	R2-072234	Background scan during MBMS PTM reception	CR	3013		25.331 Rel-7	Ericsson
agreed	R2-072235	Default MBMS activation time and 'MBMS all unmodified p-t-m services'	CR	3014		25.331 Rel-6	Nokia
agreed	R2-072236	Default MBMS activation time and 'MBMS all unmodified p-t-m services'	CR	3015		25.331 Rel-7	Nokia
agreed	R2-072238	Problem with the IE 'MBMS service identity' included in the IE 'RAB info'	CR	3016		25.331 Rel-6	Ericsson
agreed	R2-072239	Problem with the IE 'MBMS service identity' included in the IE 'RAB info'	CR	3017		25.331 Rel-7	Ericsson
-							Nokia, Nokia Siemens
agreed	R2-072245	Support of RFC 3095 (ROHC) Compression RoHC Compression Status	CR	157		25.306 Rel-6	Networks
							Nokia, Nokia Siemens
agreed	R2-072246	Support of RFC 3095 (ROHC) Compression RoHC Compression Status	CR	158		25.306 Rel-7	Networks
agreed	R2-072247	Correction of SRB delay	CR	3018		25.331 Rel-6	NEC
agreed	R2-072248	Correction of SRB delay	CR	3019		25.331 Rel-7	NEC
agreed	R2-072249	Update of normative references for Robust Header Compression (RFC3095)	CR	303		25.323 Rel-6	Ericsson
agreed	R2-072250	Update of normative references for Robust Header Compression (RFC3095)	CR	304		25.323 Rel-7	Ericsson
agreed	R2-072251	Incorrect reference to 25.993 for default configuration 17	CR	3020		25.331 Rel-6	Ericsson
agreed	R2-072252	Incorrect reference to 25.993 for default configuration 17	CR	3021		25.331 Rel-7	Ericsson
agreed	R2-072253	Removal of redundant IE 'MBMS-PreferredFreqRequest-r6'	CR	3022		25.331 Rel-7	Ericsson
agreed	R2-072254	Correction to CTFC for default configuration 12	CR	3023		25.331 Rel-6	NEC
agreed	R2-072255	Correction to CTFC for default configuration 12	CR	3024		25.331 Rel-7	NEC
		Introduction of Improved L2 support for high data rates and Enhanced					
agreed	R2-072258	CELL_FACH state	CR	318	3	25.321 Rel-7	Ericsson, Nokia, NSN
							Nokia Siemens Networks,
agreed	R2-072262	Introduction of two DRX schemes in URACELL_PCH and CELLURA_PCH	CR	3004	1	25.331 Rel-7	Nokia
							IPWIREIESS, LG Electoronics
							Orango PITT CMCC CATT
							TD Tech ZTE Spreadtrum
							CommunicationsLG
							Eletcronics Inc., IP Wireless.
agreed	R2-072263	MBMS FDD and TDD Physical Layer Improvements	CR	159		25.304 Rel-7	IPMobile, UTStarcom
0							IPWireless, LG Electcronics
							Inc., IPMobile, UTStarcom,
							Orange, RITT, CMCC, CATT,
							TD Tech, ZTE, Spreadtrum
							CommunicationsLG
	50.070004		0.5	450		05 000 B 1 7	Eletcronics Inc., IP Wireless.,
agreed	R2-072264	MBMS FDD and TDD Physical Layer Improvements	CR	159		25.306 Rel-7	IPMobile, UTStarcom
							IPWIFEIESS, LG Electronics
							Orango PITT CMCC CATT
							TD Tech ZTE Spreadtrum
agreed	R2-072265	MBMS ETDD and FTDD Physical Laver Improvements	CR	3026		25 331 Rel-7	Communications G
49.004			0.11	5020		20.0011011	

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agreed	R2-072266	Corrections on modulus base in UM in RLC	CR	310
agreed	R2-072267	Corrections on modulus base in UM in RLC	CR	311
agreed	R2-072270	HSPA RAB Combinations	CR	96
agreed	R2-072271	Additional HSPA RAB Combinations	CR	97
agreed	R2-072276	Removing an incomplete optimization for RLC operations during HSDPA cell change	CR	319
ugroou		Removing an incomplete optimization for RLC operations during HSDPA cell	on	010
agreed	R2-072277	change	CR	22
agreed	R2-072278	Introduction of Wait time to Cell Update Confirm	CR	3027
agreed	R2-072279	Removing the limitation of SRNC identity size	CR	3028
agreed	R2-072280	Using special value of HE field to indicate end of an SDU for RLC AM	CR	312
-		Support for signalling of F-DPCH slot formatsIntroduction of enhanced F-		
agreed	R2-072283	DPCH	CR	3031
agreed	R2-072284	Introducing 16QAM uplink support	CR	2982
agreed	R2-072285	Introducing 16QAM uplink support	CR	311
agreed	R2-072287	GANSS support to UE capabilities	CR	160
		Recommandation on RLC PDU size selection on E-DCHRLC PDU Size for		
agreed	R2-072288	maximisation of data	CR	320
agreed	R2-072289	Introducing 16QAM uplink support	CR	151
agreed	R2-072292	Addition of RAB combinaison for SRB mapped on DL "HSDPA + DCH"	CR	94
agreed	R2-072293	Clarification for control of E-RUCCH transmission in LCR TDD	CR	321
agreed	R2-072294	Addition of E-DCH Scheduling Information Power Offset in TDD mode	CR	3034
Ū.	R2-07 <u>2343</u>	, , , , , , , , , , , , , , , , , , ,		
agreed	2295	Corrections to tabular for non-scheduled transmission for LCR TDD	CR	3035
agreed	R2-072296	Some Small Editorial Corrections to TS 25.321	CR	322
		Introduction of PRACH configuration in protocol messages triggering E-DCH		
agreed	R2-072297	serving cell change in LCR TDD modesystem	CR	3036
agreed	R2-072298	Some clarifications related to E-DCH Scheduling Information in TDD mode	CR	324
agreed	R2-072299	Some corrections for LCR TDD EUL to TR 30.302	CR	<u>000</u> 1
agreed	R2-072300	Correction to definition of maxNumE-AGCH for TDD	CR	3037
agreed	R2-072301	Introduction of E-TFC Selection for 1.28Mcps TDD	CR	323
agreed	R2-072302	Correction to definition of Power Resource Related Information (TDD only)	CR	3038
agreed	R2-072304	Introducing 16QAM uplink support	CR	2982
5		Introduction of HS-DSCH reception in CELL_FACH, URA_PCH and		
agreed	R2-072305	CELL_PCH	CR	3003
agreed	R2-072306	UE capabilities for HS-DSCH reception in CELL PCH, URA PCH and	CR	161

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		Eletcronics Inc., IP Wireless.,
		IPMODIE, UI Starcom
	25.322 Rel-0	ASUSTER
	25.322 Rel-7	Nokia Siemens Networks T-
	25.993 Rel-7	Mobile
	25 993 Rel-7	Nokia Siemens Networks
	20100011011	Ericsson. LG Electronics Inc
	25.321 Rel-7	Samsung
		Ericsson, LG Electronics Inc.,
	25.308 Rel-7	Samsung
	05 004 5 1 7	Nokia Siemens Networks,
	25.331 <u>Rel-7</u>	Nokia
	25.331 <u>Rel-7</u>	Nokia Siemens Networks
	25 222 Dol 7	Ericsson, Nokia, NSN,
	25.522 Rel-7	Samsung
	25.331 Rel-7	Qualcomm Europe
5		QUALCOMM Europe
2	25.321 Rel-7	QUALCOMM Europe
		Orange, Alcatel-Lucent,
	25. 306 Rel-7	Nokia <u>, SiRF</u>
	25.321 Rel-6	NEC
2	25 306 Rel-7	
1	25 993 Rel-7	Alcatel-Lucent
•	25 321 Rel-7	
	25 331 Rel-7	ZTE, GATT
	20.00111017	212, 0, 11
<u>1</u>	25.331 Rel-7	CATT, TD-Tech, ZTE
	25.321 Rel-7	CATT
	25 331 Rel-7	ZTE CATT
	25.321 Rel-7	ZTE, CATT
	30 302 Rel-7	CATT TD-Tech ZTF
	25.331 Rel-7	CATT. IPWireless
	25.321 Rel-7	ZTE, CATT, TD TECH
	25.331 Rel-7	IPWireless, CATT
6	25 331 Rel-7	QUALCOMM Europe
Ŭ		Nokia Siemens Networks.
2	25.331 Rel-7	Nokia

25.306 Rel-7

Nokia Siemens Networks,

Draft1 minutes	of the 58th TSC	G-RAN WG2 meeting					
		CELL FACH statesEnhanced CELL_FACH					Nokia
agreed	R2-072307	Introduction of Improved L2 support for high data rates	CR	3025	1	25.331 Rel-7	Ericsson
agreed	R2-072308	Introduction of Improved L2 support for high data rates	CR	309	2	25.322 Rel-7	Ericsson
-							IPWireless, LG Electcronics
							Inc., IPMobile, UTStarcom,
							Orange, RITT, CMCC, CATT,
							Communications LG
							Eletcronics Inc., IP Wireless.
agreed	R2-072313	MBMS FTDD and FFDD Physical Layer Improvements	CR	27	4	25.346 Rel-7	IPMobile, UTStarcom
							Nokia, Nokia Siemens
agreed	R2-072317	MBMS Agreements					Networks, Samsung
agreed	R2-072323	MBMS Scheduling Information	CR	3039		25.331 Rel-7	Motorola
	D0 070000	Recommandation on RLC PDU size selection on E-DCH RLC PDU Size for		0007			
agreed	R2-072329	maximisation of data		2041		25.321 Rel-7	
agreed	R2-072331	MINIOR CONTECTION ON MIDING LEXI		0020		25.331 Rel-7	ZTE <u>, EIICSSOII</u> Meterolo
agreed	RZ-072332	Changes to management, handover, paging, and NAS functions, node-	UK	0029		25.340 Rel-0	MOLOIDIA
		synchronization, X2 UP protocol stack, X2 inter cell load management. IP					
		fragmentation, intra-LTE HO, and TA relation to cells in eNBChanges to					
		management-, handover-, paging- and NAS functions, node- and MBMS					
	R2-07 <u>2344</u>	content synchronization, X2 UP protocol stack, and X2 inter cell load					
agreed	2333	management Measurement reporting, state transitions, and DBX is enhanced CELL, EACH	CR	0001	1	36.300 Rel-8	RAN WG3
arreed	R2-072261	state	CR	0021	1	25 308	Nokia Siemens Networks, Nokia
Technically	112 072201		OIX	0021		20.000	Nokia Siemens Networks. T-
endorsed	R2-072269	Additional DCH RAB Combinations	CR	0095		25.993 Rel-7	Mobile
email							
agree <u>dment</u>	R2-072338	Update on Mobility, Security, MBMS, Random Access Procedure, etc	CR	0002		36.300 Rel-8	Nokia Siemens Networks
		Permetring on incomplete entimization for PLC exerctions during HSDPA coll					Friessen I C Electronics Inc.
agreed	R2-072275	change	CR	306	1	25 322 Rel-7	Samsung
			<u></u>	<u></u>	-		
	r		i.			i i	
R2-072339	Update on M	BMS <u>CR</u> 0003	36.3	300 Rel-	8	Nokia Si	emens Networks

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Annex D: Table of Outgoing LSs to 3GPP groups

NUMBER	TITLE	RAN	R1	R3	R4	R5	SA	S 1	S2	S 3	S4	S5	СТ	CT1	CT3	CT4	GERAN	GERAN1	GERAN2
R2-072186	LS on System Information		to																
R2-072268	LS on Introduction of Additional DCH RAB Combinations into 25.993		to																
R2-072188	LS on neighbour cell lists and reading neighbour cell P-BCH		to		to														
R2-072191	Reply LS on Verification of security principles			сс					сс	to	to								
R2-072194	Reply LS on LTE MBMS and PDCP			to					сс										
R2-072189	LS on further questions on Rate-Adaptive Real-time Media							to	сс		to								
R2-072193	LS on LTE latency analysis	to	сс	сс															
R2-072310	LS on Service Request for SAE/LTE								to	to				cc					
R2-072326	LS on U-Plane handling during inter eNB handovers			to					to										
R2-072334	Receiver performance and enhanced CELL_FACH state		сс		to														
R2-072335	LS on physical layer aspects of Enhanced CELL_FACH state in FDD		to																
R2-072336	LS on Physical layer enhancements for MBMS										to								
R2-072215	LS on feasibility of GAN enhancements			сс					сс					cc			to		
R2-072322	Reply LS LS on Clarification on two scenarios "Enhanced Broadcast over lur"			to															
R2-072291	LS on Release-7 feature dependencies	to																	

The outgoing Liaison Statements are also be available at:

 $tsg_ran/WG2_RL2/Outgoing_Liaisons/TSGR2_58$
Draft1 minutes of the 58th TSG-RAN WG2 meeting

Annex ED: Meeting schedule

Future WG2 and RAN plenary meetings:

Year	Meeting	Dates	Location	Country	Host
2004	RAN#24	02-04 June	Seoul	Korea	TTA
	WG2#43	16-20 Aug	Prague	Czech Republic	European Friends of 3GPP
	RAN#25	08-10 Sep	Palm Springs	USA	NA Friends of 3GPP
	WG2#44	04-08 Oct	Sophia-Antipolis	France	ETSI
	WG2#45	15-19 Nov		Japan	Japanese Friends of 3GPP
			Shin-Yokohama		
	RAN#26	07-10 Dec	Athens	Greece	European Friends of 3GPP
2005	WG2#45bis	10-14 Jan	Sophia-Antipolis	France	ETSI
	WG2#46	14-18 Feb	Scottsdale	USA	
	RAN#27	09-11 Mar	Tokyo	Japan	
	WG2#46bis	04-08 April	Beijing	China	Huawei
	WG2#47	09-13 May	Athens	Greece	EF3
	RAN#28	01-03 June	Quebec	Canada	
	WG2#48	29 Aug – 02 Sep	London	UK	EF3
	RAN#29	21-23 Sep	Tallin	Estonia	EF3
	WG2#48bis	10-14 Oct	Cannes	France	EF3
	WG2#49	07-11 Nov	Seoul	Korea	Samsung
	RAN#30	30 Nov – 02 Dec	St Julian	Malta	EF3
2006	WG2#50	09-13 Jan	Sophia-Antipolis	France	ETSI
	WG2#51	13 - 17 Feb	Denver, Colorado	US	NA Friends of 3GPP
	(Joint session	20 - 21 Feb	Denver, Colorado	US	NA Friends of 3GPP
	RAN2-RAN3-SA2)				
	RAN#31	08 – 10 March		China	
	WG2#52	27 - 31 March	Athens	Greece	EF3
	WG2 Ad-hoc	01-02 May	Espoo	Finland	Nokia
	WG2#53	08 - 12 May	Shanghai	China	Datang
	RAN#32	31 May - 02 June	Warsaw	Poland	EF3
	WG2 LTE Ad-hoc	27 - 30 June	Cannes	France	EF3
	WG2#54	28 Aug - 01 Sept	Estonia	Tallin	EF3
	RAN#33	19 - 22 Sep	US	Palm Springs	NA Friends of 3GPP
	WG2#55	09-13 October 2006	Seoul	Korea	Samsung
	WG2#56	06 - 10 Nov	Riga	Latvia	EF3
	RAN#34	29 Nov - 01 Dec	Budapest		EF3
2007	Workshop with GERAN, SA and SA1 on GSM LTE handovers	10-11 Jan	Sophia-Antipolis	France	ETSI

Draft1 minutes of the 58th TSG-RAN WG2 meeting

WG2#56bis	15-19 Jan	Sorrento	Italy	EF3
WG2#57	12-16 Feb	Saint Louis, Missouri	US	NA Friends of 3GPP
RAN#35	06-09 March	Lemesos	Chypre	EF3
WG2#57bis	27-30 March	St Julians	Malta	EF3
WG2#58	07-11 May 2006	Kobe	Japan	Japanese friends of 3GPP
RAN#36	29 May - 01 June	Busan	Korea	
WG2#58bis	25-29 June	Orlando	US	NA Friends of 3GPP
WG2#59	20-24 August 2006	Athens	Greece, Europe	
RAN#37	11-14 September	Riga	Latvia	
WG2#59bis	08-12 October		China	Huawei
WG2#60	05-09 November		Korea	
RAN#38	28-30 November	US		NA Friends of 3GPP

Appendix F

LISTSERV 16.5

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Preferences	Log Out

Subscriber's Corner Email Lists

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3GPP_TSG_RAN_WG2@LIST.ETSI.ORG	LISTSERV Archives
View: Message: [First Previous Next Last] By Topic: [First Previous Next Last] By Author: [First Previous Next Last] Font: Proportional Font	3GPP_TSG_RAN_WG2 Home 3GPP_TSG_RAN_WG2 May 2007, Week 1
Subject: Challcomm documents for RAN2 458 Frem: Francesco Grill -francesco@OUALCOMM.COM> Des: Tue. 1 May 2007 21:19:4-0700 Reply Des: Tue. 1 May 2007 21:19:4-0700 End 10:10:10:10:10:10:10:10:10:10:10:10:10:1	Search Archives Advanced Options Image: Control of the second of the s
	June 2020, Week 3 June 2020, Week 2 June 2020, Week 1

Appendix G

Logged in as: friedhelm.rodermund@iotecc.com	us-ascii Expert Mode
🐹 LISTSERV 16.5	2
Subscriber's Corner Email Lists	Preferences Log Out
3GPP_TSG_RAN_WG2 Archives	
3GPP_TSG_RAN_WG2@LIST.ETSI.ORG	LISTSERV Archives
View: Message: [First Previous Next Last] By Topic: [First Previous Next Last] By Author: [First Previous Next Last] Font: Proportional Font	3GPP_TSG_RAN_WG2 Home 3GPP_TSG_RAN_WG2 May 2007, Week 1
Subject: [RAN2#58] Another Samsung contribution From: Himke Vandervelde Keply Total Reply.or Himke Vandervelde @SAMSUNG.COM> Date: Thu, 3 May 2007 16:43:20 +0200 Content-Type: multipart/mixed Parts/Attachments: @retx/plain (21 lines), text/html (83 lines), R2-071911.zip (83 lines)	Search Archives Advanced Options Search Search
Dear RAN2 colleagues,	Options
Please find attached the following Samsung contribution for RAN2#58.	Change Password
R2-071911 System Information structure 4.5 Samsung	
My apologies for the late distribution.	Search Archives
With kind regards, Himke	Subscribe or Unsubscribe Post New Message Newsletter Templates Preferences
	Archives January 2021, Week 4 January 2021, Week 3 January 2021, Week 3 January 2021, Week 4 December 2020, Week 5 December 2020, Week 4 December 2020, Week 2 December 2020, Week 2 December 2020, Week 4 November 2020, Week 4 November 2020, Week 4 November 2020, Week 4 November 2020, Week 4 October 2020, Week 4 September 2020, Week 4
Top of Message Previous Page Permalink	September 2020, Week 3 September 2020, Week 3
	September 2020, Week 1 August 2020, Week 4 August 2020, Week 4 August 2020, Week 4 August 2020, Week 2 August 2020, Week 4 July 2020, Week 4 July 2020, Week 4 July 2020, Week 4 July 2020, Week 1 June 2020, Week 1 June 2020, Week 3 June 2020, Week 3 June 2020, Week 4 June 2020, Week 4 May 2020, Week 4 May 2020, Week 4 May 2020, Week 5 April 2020, Week 4 April 2020, Week 5 April 2020, Week 4 April 2020, Week 5 April 2020, Week 4 April 2020, Week 4 April 2020, Week 4 April 2020, Week 4 April 2020, Week 5 March 2020, Week 4 March 2020, Week 4 March 2020, Week 4 March 2020, Week 4 February 2020, Week 4 January 2020, Week 4 January 2020, Week 4

Appendix H

(TSG-RAN WG2 meeting #58 07-11 May 2007) R2-072131xxxx

 Title:
 Draft(10) minutes of the 57bis TSG-RAN WG2 meeting (Malta, 26-30 March 2007).

 Document for:
 <u>AppprovalComments</u>

 Source:
 3GPP support team

Please send your last comments by the 23rd April 2007

 02nd April 2007. Last modified 04 May 2007.

 Claude Arzelier

 ETSI Mobile Competence Centre

 F-06921 Sophia Antipolis Cedex

 Tel: +33 4 92 94 42 61

 Email: Claude.Arzelier@etsi.org

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Opening of the meeting 1

Call for IPR 1.1

Miss Agnes Revel from Motorola welcomed the participants to Malta on behalf of the EF3. Mr. Denis Fauconnier (Chairman) opened the meeting at 09.00 am.

The Chairman made the following IPR call:

The attention of the delegates of this Working Group was drawn to the fact that 3GPP Individual Members have the obligation under the IPR Policies of their respective Organizational Partners to inform their respective Organizational Partners of Essential IPRs they become aware of. The delegates were asked to take note that they were hereby invited:

to investigate whether their organization or any other organization owns IPRs which were, or were likely to become Essential in respect of the work of 3GPP.

to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Statement and the Licensing declaration forms • (http://webapp.etsi.org/lpr/).

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NOTE: IPRs may be declared to the Director-General or Chairman of the SDO, but not to the RAN WG2 Chairman.

Current minutes of the 57bis TSG-RAN WG2 meeting				
2 Approval of the agenda				
R2-071130 RAN2-57bis Agenda Denis Fauconnier (Chairman) proposed the agenda for the meeting. Decision: The agenda was approved.	WG Chairman			
3 Minutes from the previous meetings				
R2-071151 Minutes of RAN2-57, 12-16 February 2007, Saint-Louis, USA The document was revised before presentation in R2-071547:	ETSI MCC			
R2-071547 Updated Minutes of RAN2-57, 12-16 February 2007, Saint-Louis, USA The minutes were approved.	ETSI MCC			
4 Reports from other groups				
R2-071544 RAN Chairman report of RAN-35 to SA-35 (SP-070223) (Document provided for information).	TSG RAN Chairman			
R2-071548 (Draft2) Minutes of TSG RAN-35 meeting, Cyprus, 06-09 March 2007 (Document provided for information).	ETSIMCC			
5 UTRA/UTRAN Long Term Evolution				
R2-071498 Proposed work plan for LTE performance verification The document was presented by Guillaume Sebire from Nokia. Discussion:	Rapporteur			

Decision: The way forward was approved.

China Mobile, KPN, NTT DoCoMo, Orange, Sprint, T-Mobile, Telecom Italia, LTE System Analysis of Control Plane and User Plane Latency and Handover Interruption Times R2-071389 Vodafone The document was presented by Dave Fox from Vodafone. Discussion: It was clarified that the misalignment between bullet points 2 and 3 (in clause 3) was intentional: success probabilities (/requirements) may be different between the two, since retransmission schemes are different. Subclause 4: Main requirements are in bold. Those are minimum performance requirements. Decision: The document was approved. An email discussion will be held. 5.1 Incoming LSs on LTE R2-071505 (CP-070227, Cc RAN2). Reply LS (to CP-070083) on GERAN - LTE interworking TSG CT TSG GERAN R2-071507 (GP-070549, to RAN2). LS on GERAN - LTE interworking The documents were presented by Mr Ravi Kuchibhotla from Motorola. Discussion: R2-071507: There are related ongoing discussions in SA2 this week. There are related discussions on the GERAN2 reflector at the moment. What about the UTRAN CS / LTE interworking ? The two scenarios would fulfill the requirements, limiting the number of scenarios is always useful. R2-071505: Is this not more to SA to decide, than GERAN ? Minimum UE and Network support for the functionality to work would be needed. Drawbacks/Complexity for each scenario to work would make the picture clearer. Scenarios 11-14 make no difference from the RAN2 viewpoint. Decision: The document was noted. R2-071508 (R1-071213, to RAN2). Reply LS (to R2-063557) on Radio efficiency for delivery of Broadcast/Multicast Services Himke van der Velde (Samsung) presented this document. RAN WG1 Discussion: 7

Current minutes of the 57bis TSG-RAN WG2 meeting Issue 5, nieghbouring cells not providing information, was not answered. But the answer may be provided off-line as RAN WG1 is dicussing to It was reported that RAN WG1 has just decided to send an additional LS on the subject. Indication on the number of neighbour cells required to achieve the combining would be needed. Decision: The document was noted. RAN WG2 will wait for further information from RAN WG1.	his.	
R2-071510 (R1-071239, to RAN2). Reply LS (to R2-070411) on DRX interval and CQI reporting cycle in LTE Benoist Sebire (Nokia) presented this document. Discussion: Conclusion 1: reflected in the stage 2. CQI reporting cycle is equal or longer than the DRx Cycle.	RAN WG1	
R2-071511 (R1-071241, to RAN2). Reply LS (to R2-070421) on Intra-frequency vs. Inter-frequency R2-071518 (R4-070317, to RAN2). Reply LS (to R2-070421) on Intra-frequency vs. Inter-frequency Francesco Grilli (Qualcomm) presented those documents. Discussion:	RAN WG1 RAN WG4	
Gaps would be needed when bandwiths on the neighbour cells are bigger. Decision: Is there significant benefits to create gaps for 'case c', in case neighbour cell bandwidth > Serving cell bandwidth ? The answer would affect whether this case would be considered as intra/inter frequency.		
R2-071512 (R1-071248, to RAN2). Reply LS (to R2-070418) on non-initial cell search The document was presented by Vera Vukailovic from Ericsson.	RAN WG1	
R2-071519 (R4-070320, to RAN2). Reply LS (to R2-070418) on Initial search The document was presented by Benoist Sebire from Nokia. Discussion:	RAN WG4	
Decision: The document was noted, this would be technically feasible. Decision to perform these additional complexities will be taken, based associated benefits.	on the	
R2-071514 (R1-071250, Cc RAN2). LS on LTE measurement supporting Mobility The document was presented by Kyeong in Jeong from Samsung. Discussion: Decision: The document was noted.	RAN WG1	
(R3-070479, to RAN2). Reply LS (to C1-070401, R2-063683) on Radio Access Network R2-071516 Sharing in SAE/LTE The document was presented by Vera Vukajlovic from Ericsson.	RAN WG3	

Current minutes of the 57bis TSG-RAN WG2 meeting		
Discussion: Decision: The document was noted.		
R2-071549 (R3-070478, Cc RAN2). Reply LS (to C1-070562) on Usage of Tracking Areas (TA) in LTE/SAE (Already stated in R2-061516).	RAN WG3	Samsung
R2-071520 (S3-070162, to RAN2). Reply LS (to R2-070420) on SIM and USIM usage in LTE/SAE The document was presented by Magnus Lindström from Ericsson. Discussion: Decision: The document was noted.		SA WG3
R2-071523 (S2-071058, to RAN2). LS on MME separation Option B from SAE Gateway The document was presented by Sudeep from Alcatel-Lucent. Discussion: Decision: The document was noted.		SA WG2
R2-071525 (S2-071046, Cc RAN2). LS on Location of PDCP in eNode B The document was presented by Magnus Lindström from Ericsson. Discussion: Decision: The document was noted.		SA WG2
R2-071545 (R3-070509, Cc RAN2). LS on EPC update at inter eNodeB mobility The document was presented by () from Alcatel-Lucent. Discussion: Decision: The document was noted.		RAN WG3
R2-071546 (R3-070517, Cc RAN2). Reply LS on MME / UPE Pool Areas and triggers for relocation The document was presented by Magnus Lindström from Ericsson. Discussion: Decision: The document was noted.		RAN WG3
R2-071583 (R3-070700, Cc RAN2). LS on NAS Handling during intra-LTE handover The LS was postponed for the next meeting.	RAN WG3	
R2-071588 (S3-070283, to RAN2). LS on eNodeB Security The document was presented by the Chairman.	SA WG3	
5		

Discusion: Decision: The document was noted.

5.2 Items treated in email discussion (rapporteur report and inputs)

5.2.1 U-plane layer for ciphering

R2-071293 Email discussion on U-plane ciphering location for LTE The document was presented by Mikio Iwamura from NTT DoCoMo. Discussion: Decision: The document was noted.	NTT DoCoMo (email rapporteur)
R2-071241 Ciphering for the User Plane The document was presented by Bensoist Sebire from Nokia. Discussion: Decision: The document was noted.	Nokia
R2-071243 Sequence Number Handling at Handover The document was presented by Tsuyoshi Kashima from Nokia. Discussion: (Sequence Number is needed only in the case of offset). Decision: The document was noted.	Nokia
R2-071356 Ciphering Location The document was presented by Magnus Lindström from Ericsson. Discussion: Decision: The document was noted.	Ericsson
R2-071475 Ciphering in RLC The document was presented by Etienne Chaponniere from Qualcomm. Discussion: Decision: The document was noted.	Qualcomm Europe
R2-071295 Termination of Security	Ericsson

The document was presented by Magnus Lindström from Ericsson. Discussion: Decision: The document was noted. R2-071491 L2 architecture for LTE LG Electronics Inc. The document was prested by Young Dae Lee from LG Electronics. Discussion: It was clarified that the "double security avoidance" was stated (in the document) because the NAS could be integrity protected / ciphered by both RRC and NAS messages. Decision: The four proposals (from clause 2) were agreed. Summary on the subject: Decisions needed on: Data forwarding: - (A) Based on PDCP sequence number; or - (B) Assuming no PDCP sequence number, so solution without selective forwarding and repetition, but using some extra retransmissions on the radio. Ciphering at: - (A') PDCP. Preferred for Node-B and end-to -end security; or -(B') RLC. Preferred for the mobile. Ciphering in PDCP would lead to the use of sequence numbers. R2-071550 U-Plane ciphering at MAC/ciphering layer LG Electronics R2-071565 Draft LS on security requirements on the eNode B Ericsson Revised and approved in R2-071566. R2-071590 Way forward for ciphering location and user plane data handling Nokia The document was presented by Benoist Sebire from Nokia. **Discussion:**

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One solution would be to use PDCP sequence numbers, with ciphering done at the RLC entity (i.e. the PDCP sequence number would be visible there).

Decision: The Chairman requested the preference of the companies. More companies expressed a preference for ciphering in the RLC. However, objections were expressed on ciphering in RLC. In the interest of progress, consensus was reached on the decision for ciphering in PDCP. PDCP PDU, based on PDU Sequence Numbers.

5.2.2 Data handling at relocation

R2-071294 Email discussion on data handling at handover The document was presented by Mikio Iwamura from NTT DoCoMo. Discussion: One concern was expressed on solutions 1 and 2, since this would lead in retransmitting SDUs and wasting capacity (e.g. at cell edge, where the throughput

NTT DoCoMo (email rapporteur)

already needs to be optimised). However, this was already discussed and there is no need to re-open those discussions: solutions 1 and 2 are direct consequences of moving the ciphering. Decision: The document was noted.

R2-071236	Handover Requirements	Nokia
Discussion.	was presented by Mikio Iwaniara nom NTT Docomo.	
Discussion: The	document was noted.	
D2 074020	Dete Ferwarding at Usedavan	Malda
The document	Data Forwarding at handover	INOKIA
Discussion.	was presented by Isuyosin Rasinina non rookia.	
Discussion: The	document was noted.	
R2-071289	DL User plane handling at mobility	Ericsson
The document	was presented by Janne Peisa from Ericsson.	
Discussion:		
Decision: The	locument was noted.	
R2-071363	III user plane handling at mobility	Friceson
The document	Was presented by () from Friceson	Elicosoli
Discussion:		
Decision:		
The document	was noted.	

R2-071469 Data forwarding of IP packets Qualcomm Europe The document was presented by Etienne Chaponniere from Flarion. Discussion: Discussion: In-sequence delivery was decided to be required in thepast, in order to maximise throughput. Re-ordering cannot be done below RoHC if there is not context forwarding. Decision: The document was noted. Decision on in-sequence delivery for IP applications needs to be taken.
5.2.3 Implicit versus explicit DRx value update, DRx mechanism
R2-071235 Summary of email discussion on implicit vs. explicit DRX control Email Rapporteur (NEC) The document was revised presentation in R2-071553:
R2-071553 Summary of email discussion on implicit vs. explicit DRX control Email Rapporteur (NEC) The document was presented by Jinsock Lee from NEC. Discussion: Two level DRX can be seen as a signalling optimisation. Implicit transition from short to long DRX is different. Email Rapporteur (NEC) DRX after the first packet would also be possible. Another solution would be to use two level DRX, using MAC signalling for transitions. Decision: See below:
Chairman's summary of decisions on DRx (Monday evening): Decisions in green: parts in red not agreed:

Same DRx mechanism for both the UL or DL.

RACH will be allowed base on some rules. "On duration" is used in long DRx mode: • duration where the UE "wakes up" during a long DRx opportunity. In case there is no L1/L2 control during "on duration", UE goes back to sleep NRT case, UE in long (or any) DRx case, what happens when UE receives DL data or UL grant: XXXX XXXX Goes continuous or eNB can configure UE so that it goes for short DRx and not full continous XXXX XXXX XXXX XXXX NRT case, UE is continuous: 1. Stays continuous until MAC header/control message tells to goes back to any DRx value explicitely indicated in the MAC payload 2. Implicit, after non receipt for a given duration, goes to pre-defined long DRx 3. Stays continuous until MAC header/control message tells to goes back to a DRx value explicitely indicated in the MAC payload a. then back to pre-defined long DRx after more inactivity 4. Implicit, after non receipt for a given duration goes for short DRx pre-configured by the eNB a. then back to pre-defined long DRx after more inactivity, OR For discussion in stage 3: Implicit, after non receipt for a given duration goes for longer DRx (factor pre-configured by the eNB) 1. And so on, until a limit pre-configured

Implicit: Inactivity is detected and UE goes to longer DRx value or intermediate DRx value before long DRx (progressive DRx) (4, 5, to be looked at in stage 3). It should cope with errors e.g. DTX into ACK misdetection.

Explicit: MAC signalling tell the UE to go to DRx. It should cope with errors e.g. NACK into ACK misdetection. Details TBD Use of MAC signalling to bring UE in "intermediate" DRx e.g. short DRx, with implicit transition to pre-defined long DRx?

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R2-071177	CQI handling during DRX		Samsung	Mr. Gert-Jan van Lieshout
R2-071179	DRX handling		Samsung	Lieshout
		14		

R2-071247 R2-071261	DRX during continuous transmission Flexible DRX Control in LTE Hybrid DRX Control	LG Electronics Inc. SHARP RIM	Mr. Patrick Fischer
R2-071273	Downlink DRX and downlink HARQ interaction	NEC	
R2-071284	Evaluating DRX concepts for E-UTRAN	Nokia	Mr. Benoist Sebire
R2-071285	DRX parameters in E-UTRAN	Nokia	Mr. Benoist Sébire
R2-071286	On the need for flexible DRX	Nokia	Mr. Benoist Sébire
R2-071304	DRX management for LTE_ACTIVE	ETRI	
R2-071365	High Level Principles for DRX in LTE Active	Ericsson	Mr. Janne Peisa
R2-071382	DRX handling in LTE	Panasonic	
R2-071393	A Semi-Autonomous DRX Control Scheme for LTE_ACTIVE	Ericsson	Mr. Janne Peisa
R2-071394	CQI Reporting with regards to DRX operation	Ericsson	Mr. Janne Peisa
R2-071444	Discussion on Behaviour in DRX	LG Electronics Inc.	
R2-071445	DRX mechanism in LTE_ACTIVE UE	LG Electronics Inc.	
R2-071464	DRX principles	QUALCOMM Europe	
R2-071503	DRX control in LTE_Active	IPWireless	
Noted witho	It presentation		
Comment ta R2-071594	en by the RAN WG2 Chairman for remaining of clause 5: DRx and CQI reporting	NEC	
5.2.4 I	3CH for LTE		
5.2.4 I	CH for LTE On the issue of inter-RAT neighbouring info reduction	NEC	
5.2.4 I R2-071270 R2-071213	BCH for LTE On the issue of inter-RAT neighbouring info reduction Further details on LTE neighbouring list optimization	NEC LG Electronics Inc.	Mr. Patrick Fischer
5.2.4 R2-071270 R2-071213 Noted witho	BCH for LTE On the issue of inter-RAT neighbouring info reduction Further details on LTE neighbouring list optimization It presentation	NEC LG Electronics Inc.	Mr. Patrick Fischer
5.2.4 R2-071270 R2-071213 Noted witho	BCH for LTE On the issue of inter-RAT neighbouring info reduction Further details on LTE neighbouring list optimization It presentation Consideration on one-to-all Qoffset	NEC LG Electronics Inc. NTT DoCoMo	Mr. Patrick Fischer
5.2.4 R2-071270 R2-071213 Noted witho R2-071296 Presented noted	BCH for LTE On the issue of inter-RAT neighbouring info reduction Further details on LTE neighbouring list optimization It presentation Consideration on one-to-all Qoffset	NEC LG Electronics Inc. NTT DoCoMo	Mr. Patrick Fischer
5.2.4 R2-071270 R2-071213 Noted witho R2-071296 Presented noted	CH for LTE On the issue of inter-RAT neighbouring info reduction Further details on LTE neighbouring list optimization it presentation Consideration on one-to-all Qoffset	NEC LG Electronics Inc. NTT DoCoMo	Mr. Patrick Fischer
5.2.4 R R2-071270 R2-071213 Noted witho R2-071296 Presented noted R2-071401	BCH for LTE On the issue of inter-RAT neighbouring info reduction Further details on LTE neighbouring list optimization it presentation Consideration on one-to-all Qoffset Summary of BCH for LTE email discussion	NEC LG Electronics Inc. NTT DoCoMo Ericsson	Mr. Patrick Fischer Mr. Janne Peisa
5.2.4 R2-071270 R2-071213 Noted witho R2-071296 Presented noted R2-071401 Vera	SCH for LTE On the issue of inter-RAT neighbouring info reduction Further details on LTE neighbouring list optimization it presentation Consideration on one-to-all Qoffset Summary of BCH for LTE email discussion	NEC LG Electronics Inc. NTT DoCoMo Ericsson	Mr. Patrick Fischer Mr. Janne Peisa

Decisions on cell re-selection:

- LTE intra-frequency cell case: rely on detected cells (cell search)
 O Whether parameters or common or not is to be discussed; we need to look at the parameters. Need for reading neighbour cell BCH before doing the ranking is also TBD. Whether parameters or common or not is to be discussed; we need to look at the LTE inter-frequency cell case: rely on sending center frequency and rely on detected cell Inter-RAT UTRA cell case: rely on sending center frequency and rely on detected cell
- .
- .
- GSM case: send the neighbour list or only the list of BCCH frequencies (range). Ask GERAN. In case of cell re-selection from other RAT to LTE, rely on sending center frequency and rely on detected cell For inter-freq & inter-RAT & to LTE case (all except intra-freq)
- - Re-selection parameters are common to all the cells on this inter-freq or inter-RAT "layer".
 For GSM, there may be some cell specific info (TBD)
 - Need to consider the list of functions from Operators for control of cell-reselection across layers
- HCS is not necessary Do we need means to forbid some detected cells?
- yes
 yes
 Do we allow to send explicit neighbour cell list for intra-frequency e.g. to speed up cell detection?
 Yes (expected to be limited use) •

Next steps:

- Look at the detailed intra-freq list of parameters/features => Ericsson Tdoc 1558 (thu) ٠
- Send LS to GERAN => Vodafone Tdoc 1559
- Look at technique to forbid a detected cell => proposals already available Capture in the stage 2 the list of inter-layer mobility features from operators => DoCoMo Tdoc 1560 (thu) •
- Capture in the stage 2 the stor inter-tayet moonly leaders from options >> Decorrections
 Cook at proposals (one by one) to fulfill these features => next meeting
 Capture agreements: provide text proposal with agreements => Samsung Tdoc 1561 (thu)

Decisions (Thu): e-mail discussion on the cell re-selection parameters (Ericsson). In R2-071599. the stage 3 will be started directly from now; Nokia will provide a draft skeleton as part of the e-mail discussion Whether Q-offset or other information is read on the P-BCH of the neighbour cells, or read from the serving cell (white list), is still to be studied (too many companies unresolved).

R2-071561	Draft TP on use of NCL for idle mode mobility
Himke	
Revised in 1574	4

R2-071574 Draft TP on use of NCL for idle mode mobility

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Samsung

Samsung

Current minutes of the 57bis TSG-RAN WG2 meeting System Information content & delivery 5.3 R2-071298 BCH transmission interval in LTE NTT DoCoMo Presented R2-071481 System Information Scheduling Motorola Ravi E-mail discussion on: 1. What is the impact of extending the repetition period of the P-BCH, and as a consequence what is the appropriate repetition period of the P-BCH Should the period be different for e.g. 1.25MHz How should the PLMN Ids be send on BCCH What are the contents of the P-BCH In R2-071600 (Motorola). R2-071234 Cell Access Control Motorola System information content Panasonic R2-071142 R2-071155 Blacklist Maintenance HUAWEI R2-071156 Neighbour cell reduction using LCV HUAWEI QUALCOMM Europe QUALCOMM Europe R2-071203 R2-071204 Structure of BCH Scheduling of D-BCH An operator configurable procedure for reading the scheduling units Mr. Francesco Grilli Mr. Francesco Grilli R2-071257 Nokia Mr. Benoist Sébire System Information change indication Enabling DL reception of system and control information from Intra –frequency neighbors without gaps in the serving R2-071259 Nokia Mr. Benoist Sébire Texas Instruments R2-071266 cell Inc Mr. Himke van der R2-071337 System information scheduling and change notification Samsung Velde R2-071339 The life cycle of the cell from UE view Panasonic Mr. Himke van der R2-071342 R2-071343 Neighbouring cell information Samsung Velde Notification scheme of SI's Change CATT Mrs. Haiyang Quan

R2-071377 Time critical system information R2-071539 Scheduling of System Information 5.4 Random access procedure	Samsung Ericsson	Mr. Himke van der Velde		
R2-071299 Contention-based and contention-free access procedures in LTE N Presented Discussion: why the RA-RNTI and not the C-RNTI	ITT DoCoMo			
 Agreements: Handover (when it has to start by a PRACH transmission (which may be true in all handover cases): Contention free (i.e. signature is allocated) and contention based are both supported. Contention based may be a fall-back in case contention free fails (TBD). If there is a timing linked to the allocation is TBD. DL transfer during out of sync & DRX: Contention free (i.e. signature is allocated) and contention based are both supported. Contention based may be a fall-back in case contention free fails (TBD). If there is a timing linked to the allocation is TBD. UL transfer during out of sync: Contention free (i.e. signature is allocated) and contention based are both supported. Contention based may be a fall-back in case contention free fails (TBD). If there is a timing linked to the allocation is TBD. 				
Apart from the addressing (C-RNTI vs RA-RNTI) used in message 2, the complete proposal was agreed.				
Text proposal capturing agreements will be in Tdoc 1562 => DoCoMo				
R2-071174 Access Service Classes in LTE Samsung Lieshout GJ Several questions Access Barring. It was commented that we may introduce service specific barring in SA1. It was also commented that emergency calls would have access. Similarly to UTRA, a mechanism is needed for ACTIVE mode UEs The question is whether PRACH partitioning is needed like in UTRA?				
R2-071143 Random Access Preamble signatures usage P Presented 18	Panasonic			

R2-071171 presented	Pathloss & Size in RACH signature	Samsung, NTT DoCoMo	Mr. Gert-Jan van Lieshout
R2-071264 R2-071265 Presented noted	Optimized provisioning of RACH in LTE Content of Message1 and the RACH procedure in LTE	Texas Instruments Inc Texas Instruments Inc	
R2-071322 presented	Transport format and power headroom in preamble	LG Electronics Inc.	Mr. Patrick Fischer
R2-071461 Noted withou The proposal	RACH signature content it presentation is agreed, as well as the "ranges" as described in Tdoc 1171. A text proposal will be provided in	QUALCOMM Europe	
R2-071422 R2-071303 Noted withou	Random access with dedicated preambles at handover Non-contention based RA preamble It presentation	Ericsson ETRI	Mr. Janne Peisa
R2-071215 R2-071446 R2-071381 Noted withou	Allocation of a "short" C-RNTI in message 2 Clarification and optimization of message 2 On setting the C-RNTI in RACH message two It presentation (will be looked at in stage 3)	LG Electronics Inc. LG Electronics Inc. Siemens Networks	Mr. Patrick Fischer
R2-071316 Dave Noted	RACH backoff control	Siemens Networks	
R2-071184 Noted withou	RACH procedure(s) in E-UTRAN it presentation	IPWireless	
R2-071228 Noted withou	Dedicated Random Access Signatures It presentation	Motorola	

The separation if Figure 2 was discussed. The document was noted.

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R2-071230 Noted witho	Random Access Design and Procedure with Dedicated Signatures ut presentation		Motorola	
R2-071237 Noted witho	RACH Resource Management at presentation (will be looked at in stage 3)		Motorola	
R2-071275 Noted witho	RACH Resource Control ut presentation		NEC	
R2-071281 R2-071308 R2-071384 R2-071386 R2-071455 R2-071456 R2-071492 R2-071537 R2-071538	message 2 issue in random access procedure RACH backoff control Discussion on contents of message 3 Contention resolution in aRACH Use of dedicated RACH signatures Discussion on Message 4 in Random Access Contention Resolution and Initial Random Access Issues on Random Access Procedure Optimization of RACH model		ZTE Siemens Networks Alcatel-Lucent, Samsun Samsung LG Electronics Inc. LG Electronics Inc. TD Tech ASUSTeK ASUSTeK	Mr. Zhongda Du g Mr. Sam Jiang Mr. Sam Jiang
Tdoc 1563: 0	Group management AI 5.5			
Tdoc 1564 r	ev of 1390			
5.5 \$	Scheduling (UP and DL contributions)			
Optimisatio	ns for VoIP			
R2-071535	Way Forward for DL Scheduling	Alcatel-Lucent, CATT, Elektrobit, ETRI, Fujitsu, ITRI, Mitsubishi, NI Nokia, NTT DoCoMo, Panasonic, Qualcomm, Samsung, Siemens Networks, Texas Instruments Alcatel-Lucent, CATT, Elektrobit, Ericsson, ETRI, Fujitsu, ITRI, Mitsubishi, NEC, Nokia, NTT DoCoMo, Panasonic, Qualcomm, Campung, Siempon Netherstring	EC, , Mr. Benoist Sébire ,	2
R2-071551 Benoist	Way Forward for DL Scheduling	Texas Instruments	Mr. Benoist Sébire	9

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		Freescale Semiconductor, Huawei, IP Wireless, Infineon, Interdigital, LG Electronics.	
R2-071484 Ravi	Text proposal for DL scheduling	Motorola, Nortel, SHARP, ZTE	
Same text as	St Louis		
R2-071135 Presented	Concerns on the group scheduling	samsung	
R2-071225 Benoist	Performance of Grouping	Nokia	Mr. Benoist Sébire
R2-071533 Ravi	Response to R2-071225	Motorola	
R2-071462 Etienne	Comparison of persistent and group scheduling	QUALCOMM Europe	
R2-071242 Presented noted	Group Based Optimization for Signalling of Downlink Scheduling	SHARP	
R2-071368 Presented noted	Persistent DL Scheduling and VoIP	Alcatel-Lucent	Mr. Osman Aydin
R2-071460 Benoist	Uplink Scheduling for VoIP	Nokia	Mr. Benoist Sébire
R2-071536	Way Forward for UL Scheduling	CATT, Elektrobit, ETRI, Fujitsu, ITRI, LGE, Mitsubishi, NEC, Nokia, NTT DoCoMo, Qualcomm, Samsung, Siemens Networks	Mr. Benoist Sébire
		5,	

Current minu noted	tes of the 57bis TSG-RAN WG2 meeting		
R2-071483 Ravi	VoIP Performance	Motorola	
R2-071485 noted	Text proposal for UL scheduling	Motorola,	
R2-071292 Magnus noted	Scheduling optimizations – way forward	Ericsson	Mr. Janne Peisa
R2-071534 Ravi noted	Response to R2-071292	Motorola	
R2-071486 Ravi noted	Discussion on scheduling	Motorola,	
R2-071227 Benoist Noted	Number of Control Symbols	Nokia	Mr. Benoist Sébire
Chairman	summary on VoIP scheduling:		
DL: Persistent so • Asyr	cheduling: ne adaptive b Which UE capability?		
Persistent so	sheduling:		

• Which UE capability?

Group scheduling synchronous (details of message encoding, need for blind TF detection, tbd)

(reduced L1/L2 message size)

Increase number of L1/L2 control channels

UL:

- Persistent scheduling:
 - Sync adaptive o + special mechanism?

- Persistent scheduling: Sync non adaptive + special mechanism?

Group scheduling synchronous (details of message encoding, need for blind TF detection, tbd)

Increase number of L1/L2 control channels

(reduced L1/L2 message size)

DL	1 st choice	2e choice	
Async adaptive	Nokia, Siemens,	Qualcomm,	
	DoCoMo,	Alcatel-Lucent	
	Ericsson,	16	
	Panasonic,		
	Samsung, TI,		
	CATT, TDTech,		
	ETRI, ITRI,		
	Fujitsu, NEC,		
	Orange		
	14		
Sync non adaptive	Qualcomm,	Samsung,	
	Alcatel-Lucent	DoCoMo, TI, NEC	

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	2	6	
Group sync	Motorola,		

Group sync	Huaweï, IPW, Interdigital, ZTE, Freescale, Nortel, Marvell, Sharp, Infineon 10		
UL			
Persistent (first trans	Nokia, Siemens,	LGE, Qualcomm	
non-scheduled) sync	DoCoMo,	14	
adaptive	Ericsson,		
	Panasonic,		
	Samsung, CATT,		
	TDTech, ETRI,		
	ITRI, Fujitsu,		
	NEC,		
	12		
Persistent (first trans	TI, Qualcomm,		
non-scheduled) sync	LGE		
non adaptive	3		
Sync group	Motorola,		
	Huaweï, IPW,		
Sync, L1/L2	Interdigital,		
common message	Freescale, Nortel,		
allowing	Marvell, Sharp,		
adaptiveness	Infineon, Alcatel-		
	Lucent		
	10		

Decisions on VoIP scheduling:

DL: We decide on persistent (no L1/L2 control message for first transmission aka HS-SCCH less) Async adaptive



UL:

We ask RAN1 to study if they can provide more L1/L2 control channels for VoIP UL dynamic (individual L1/L2, no group) scheduling (RAN2 should indicate how many bits are needed so that they can make the study)

We re-think whether we are control channel limited for VoIP if we apply the DL decision

Use operator simulation assumptions

At next meeting, look at results; if we still want to optimise UL for VoIP, we follow simple majority between sync group and Persistent (first trans non-scheduled) sync adaptive

Other topics

R2-071176 Handling of AMBR GJ agreed	Samsung, Ericsson, Nokia, NTT DoCoMo, Siemens Networks	Mr. Gert-Jan van Lieshout
Scheduling request		
R2-071182 Contention-based scheduling request in LTE_ACTIVE Presented Agreed: a rule will be defined whereby the UE can use the async RACH to mal	IPV ke a scheduling request e.g. low dut	Vireless y cycle UE
R2-071180 Downlink Hybrid ARQ Signaling Noted, stage 3	Samsung	Mr. Gert-Jan van Lieshout
R2-071390 Discussion on Uplink Scheduling Request	TD Tech Ltd.	
R2-071564 Discussion on Uplink Scheduling Request	TD Tech Ltd.	
R2-071345 Enhancement to Buffer Status Reporting	CATT, RITT	Mrs. Haiyang Quan

Current minute	s of the 57bis TSG-RAN WG2 meeting			
R2-071165	A New Measurement to Support UL Scheduler Operation	Mitsubishi Electric	Corp.	
R2-071283 noted	Combination of Schedule and frequency hopping	ZTE		Mr. Zhongda Du
5.6 1	ime alignment principles			
R2-071300 Presented noted	Uplink synchronization		NTT DoCoMo	
R2-071272 Presented noted	On the issue of permanent maintenance of uplink synchronization		NEC	
R2-071267 R2-071419 R2-071447 Noted withou	On Uplink Synchronization maintenance in LTE Delivery of TA in LTE_ACTIVE How to transmit TA information it presentation		Texas Instruments Inc IPWireless LG Electronics Inc.	

Discussion:

we need to understand the various UL solutions defined in RAN1 to measure TA in the eNB (pilots, UL-SCH...) and their performance/cost. Then we will look at the solution needed in RAN WG2. Solution such as measuring DL drift can also be asked to RAN1.

Conclusion:

Stage 2 will capture that in some cases e.g. long DRx, UE can go out of sync; and that the basic assumption is that a timer in the UE will be used to detect out-of-sync, but more elaborate solutions will be studied.

Drat LS to RAN WG1 in 1567 (Samsung)

5.7 MIMO support

R2-071260 Efficient CQI feedback

LS to RAN WG1 will be sent in Tdoc 1572

5.8 UE Capabilities

R2-071332 Guidelines on the definition of LTE UE classes These are bit rates available at the application layer, for NRT traffic. This will have to be translated into PHY & L2 requirements by RAN1 & RAN2; system is optimised. FDD & TDD classes should be harmonised (numbers had FDD in mind) Conclusion: The classes will be captured in the stage 2, numbers in square brackets.	T-Mobile, NTT DoCoMo, Telecom Italia, Orange, ChinaMobile, Ericsson, Infineon Technologies, Nokia it was noted that requirement	Mr. Axel Klatt s may be higher than these values so that
R2-071211 Framework for UE capability handling in LTE UE capability can be stored in the CN. Layer to send it (NAS or RRC) has to be s Network should be able to request UE cap the UE A part of the UE capability information may always be provided at RRC con est	QUALCOMM Europe studied. when needed for early RRC f	unctions e.g. rerouting
R2-071328 Handling of UE capability information in SAE/LTE Inter-RAT case has to be understood. noted	Ericsson	Mr. Janne Peisa
R2-071175 UE Downlink reception capability GJ Noted, we need RAN WG1 to progress further.	Samsung	Mr. Gert-Jan van Lieshout
R2-071414 Simultaneous Tx/Rx (Duplex) Capabilities of LTE	IPWireless	

HUAWEI

Presented

It will be captured in the Stage 2 that HD UEs are a specific UE category, band specific, and the eNB will have to respect UE category i.e. HD mandatory support in eNB if UE categories exist with this capability.

5.9 E-UTRAN identities

R2-071349 Himke Noted	Use of tracking area- and cell identity for private networks/home cells	Samsung	Mr. Himke van der Velde
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5.10 LTE_ACTIVE mobility procedures

R2-071134	Transmission of Scheduling Information for Handover in RRC Dedicated Message	Panasonic	
R2-071252	On the need for forward HO	Nokia	Mr. Benoist Sébire
R2-071372	E-UTRA Measurement Configuration and Control	Ericsson	Mr. Janne Peisa
R2-071398	Idle Gaps for Handover Measurements in E-UTRAN	Ericsson	Mr. Janne Peisa
R2-071463	LTE Intra/Inter-RAT handover algorithms for LTE_ACTIVE state	QUALCOMM Europe	Mr. Francesco Grilli
R2-071255	High level mobility procedure in heterogeneous networks	Nokia	Mr. Benoist Sébire
R2-071258	Mobility uses cases based on the access pipe concept	Nokia	Mr. Benoist Sébire
		NTT DoCoMo, Orange, Telecom Italia, T-Mobile,	
R2-071301	Inter-frequency/RAT mobility control drivers and solutions	Vodafone	

5.10.1 Intra LTE

R2-071144	Measurement Functionality Split for Brodcast and Dedicated	Panasonic	
R2-071157	Admission Control at Target eNB	Nortel	
R2-071160	Redirection scheme in LTE	HUAWEI	
R2-071183	Contention-free Intra-LTE handover in synchronous network	IPWireless	
R2-071188	Minimizing the RACH Procedure Requirement During LTE Handover	InterDigital	Mr. Stephen Terry
R2-071205	Protocol termination for HO signalling	QUALCOMM Europe	

R2-071200	Considerations on RRC re-establishment		M. D
R2-071229	Radio Link Failure and Context Recovery	Nokia	Mr. Benoist Sebire
R2-071231	Handover Fallure Recovery	Nokia Nakia Ciamana	IVIR. Benoist Sebire
DO 074000	Balavant Information for HO	Nokia, Siemens	Mr. Donaiat Sábira
22 071232	East and Reliable Handover	Networks	Mr. Bonoist Sébiro
22-071239		Nokia	Mr. Denoist Sebire
22-071240	Forwarding Instant	Nokia	Mr. Bonoist Sébiro
12-07 1255	Ontimized HO method for reducing latencies in LIL synchronization and initial LIL allocation in E-	NONIA	IVII. Denoist Sebire
2-071269		Texas Instruments Inc	
R2-071271	Connection Re-establishment	NEC	
32-071276	HO measurements	NEC	
R2-071282	optimization of handover procedure by using dedicated signature	ZTE	Mr. Zhongda Du
R2-071290	Intra-LTE handover optimization	Ericsson	Mr. Janne Peisa
R2-071318	Gap control in E-UTRAN	Samsung	
R2-071359	Radio link failure	Ericsson	Mr. Janne Peisa
R2-071360	Reliability considerations for the Handover Command	Alcatel-Lucent	Mr. Osman Aydin
R2-071361	RLC status reporting during handover	Alcatel-Lucent	Mr. Osman Aydin
R2-071362	Radio Link Failure and RRC Context Recovery	Alcatel-Lucent	Mr. Osman Aydin
R2-071364	Relevant Information for Handover	Alcatel-Lucent	Mr. Osman Aydin
			Mr. Himke van der
R2-071373	Evaluation of backward handover schemes	Samsung	Velde
R2-071379	Early RACH Access with Reserved Signatures for inter-eNB Handover	ITRI	
R2-071388	UL timing synchronized handover	Samsung	
R2-071402	Mobility during attach	Ericsson	Mr. Janne Peisa
R2-071416	Resource allocations in target cell after Handover	NEC	
R2-071417	Text Proposal for Intra-LTE Handover	NEC	
R2-071431	Support of ROHC and context relocation	NEC	Mr. David Lecompte
R2-071448	Issue on periodic measurement reporting	LG Electronics Inc.	
R2-071459	High Level Comparison of Handover in GSM, UMTS and LTE	QUALCOMM Europe	

 R2-071201
 Text proposal on measurement gap scheduling

 R2-071307
 Measurement gap control principles

 R2-071351
 Drivers for Inter-RAT Radio Resource Management

 R2-071355
 Radio Resource Management Aspects of Inter-RAT Handovers

 R2-071418
 User plane handling in case of IRAT mobility

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QUALCOMM Europe Mr. Francesco Grilli NTT DoCoMo Mr. Janne Peisa Mr. Janne Peisa

Ericsson Ericsson NEC
Current minutes of the 57bis TSG-RAN WG2 meeting R2-071254 Requirements for redirection in E-UTRAN

Nokia, Telecom Italia Mr. Benoist Sébire

Mr. Janne Peisa

Ericsson

Alcatel-Lucent

5.11 LTE_IDLE mobility procedures

R2-071207 R2-071214 R2-071305	Camping load balancing in LTE Optimization for Tracking Area Update signalling Load balancing solutions for LTE	QUALCOMM Europe QUALCOMM Europe NTT DoCoMo, T-Mobile Electronics	e, Orange, LG
5.11.1 I	ntra LTE		
R2-071325 R2-071493 R2-071494	UE assisted tracking area update Multiple tracking areas concept and influence on paging load Intra-LTE and inter-RAT cell reselection	LG Electronics Inc. NEC NEC	Mr. Patrick Fischer
5.11.2 L	TE to/from other RATs		

 R2-071354
 On Inter-RAT Cell Reselection Principles

 R2-071383
 Discussion on RAN implications of Equivalent Tracking areas

5.12 LTE MBMS

 R2-071527
 Definitions relating to SFN in E-MBMS
 Vodafone Group

 The document was presented by Dave Fox from Vodafone.
 Disucssion:

Rel-7 definitions include SFN defined on a Timeframe basis (for TDD). This (and other Rel-7 definitions) need to be taken into account. It will be useful to progress on terminology definitions (see e.g. previous LSs received on the subject of terminologies). The document was also presented in RAN WG3.

The difference between guard cluster and reserve cell is that the reserve cell is within the MBMS transmission cluster.

Current minutes of the 57bis TSG-RAN WG2 meeting Decision: This will be subect to an <i>email discussion</i> .					
R2-071413 Discussion of eMBMS Uplink Feedback Schemes R2-071527 Definitions relating to SFN in E-MBMS R2-071530 Scheduling of the MCCH R2-071531 UE State during MBMS Reception	NEC Vodafone Group Vodafone Group Vodafone Group				
5.12.1 Requirements/Scenarios					
R2-071248 Header Compression in MBMS for E-UTRAN The document was presented by Henri Koskinen from Nokia. Discussion: There are two remaining possibilities, following a RAN3 decision that if PDCP is used in multi (See R3-070708). It was clarified that audio broadcast was not considered here. Decision: The document was noted. RAN WG2 confirm the decision of having PDCP in the ga	R2-071248 Header Compression in MBMS for E-UTRAN Nokia, Siemens Networks The document was presented by Henri Koskinen from Nokia. Discussion: There are two remaining possibilities, following a RAN3 decision that if PDCP is used in multicell case, it will be in the central node in the gateway. See R3-070708). t was clarified that audio broadcast was not considered here.				
R2-071435 Over provisioning required to accommodate overlapping SFN areas The document was presented by <u>Jvan VukovicVin ()</u> from Motorola. Discussion: Are services distributed at random ? This highlights that MBMS Service areas are overlapping while it was reported that the MBMS overlapping issue Augusta to the PAN2 complexity in not performing the poting ?	Motorola 6 co-ordination entity (defined in RAN3) addresses this	Formatted: Font: (Default) Times New Roman, 12 pt			
R2-071435 Over provisioning required to accommodate overlapping SFN areas The document was presented by <u>Ivan VukovicVin ()</u> from Motorola. Discussion: Are services distributed at random ? This highlights that MBMS Service areas are overlapping while it was reported that the MBMS overlapping issue. However, what is the RAN2 complexity in not performing the restriction ? Only one service for the MBSFN area may be too restrictive (Nokia). Decision: The document was noted. There will be no specific restriction on the way how SFNs	Motorola 5 co-ordination entity (defined in RAN3) addresses this are configured.	Formatted: Font: (Default) Times New Roman, 12 pt			
R2-071435 Over provisioning required to accommodate overlapping SFN areas The document was presented by <u>Jvan VukovicVin ()</u> from Motorola. Discussion: Are services distributed at random ? This highlights that MBMS Service areas are overlapping while it was reported that the MBMS overlapping issue. However, what is the RAN2 complexity in not performing the restriction ? Only one service for the MBSFN area may be too restrictive (Nokia). Decision: The document was noted. There will be no specific restriction on the way how SFNs R2-071591 UE State during MBMS Reception The document was presented by Dave Fox from Vodafone. Discussion: There is a typo: Dedicated/shared should be read insted. MBMS reception States and RRC States are missing. This defines UE autonomous reselections, with UE feedback still possible. The proposalis for ptm direct feedback + ptp network controlled cell reselections. 3 possibilities:	G co-ordination entity (defined in RAN3) addresses this are configured. Vodafone Group	Formatted: Font: (Default) Times New Roman, 12 pt			

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 Simple polling. Counting only.
 Counting + establish some sort of connection while the UE keeps its mobility.
 Some sort of connection with network controlled mobility.
 Decision: The document was noted.
 Email discussion to capture the possibilities and identify benefits and drawbacks. Information on true point to point or not is needed.
 Realistic case in the uplink shared case is also needed.
 Rapporteur: Dave Fox, Vodafone. In R2-071592.

 R2-071226
 Uplink Feedback for E-MBMS

 R2-071246
 MCCH Control

 R2-071278
 PTP/PTM radio bearer switching in E-MBMS scenarios

 R2-071279
 Considerations on uplink feedback channel for E-MBMS

 R2-071270
 Considerations on uplink feedback channel for E-MBMS

 R2-071400
 DL-SCH supporting single cell PTM with HARQ/CQI Discussion on E-MBMS deployment scenarios

 R2-071407
 Withdrawn before presentation.

 R2-071501
 Additional Results on EMBMS Transmission Configurations

 R2-071528
 MCCH Optimisation for MBMS Enhanced Broadcast

5.12.2 Stage 2 inputs

R2-071145	MCCH Transmission in LTE
R2-071146	Uplink feedback for eMBMS operations
R2-071158	MBMS Network Optimization
R2-071159	Hierarchical MCCH
R2-071202	E-MBMS scheduling
R2-071217	CQI reporting for E-MBMS AMC
R2-071244	MBMS Agreements
R2-071245	MBMS Definitions
R2-071319	Inter Layer Notification
R2-071326	Layer 1 signalling based user detection for LTE MBMS
R2-071330	LTE MBMS SFN: Super-frame Based Content Synchronisation
R2-071347	Counting procedure for LTE MBMS
R2-071369	Multiplexing of MBMS services

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Motorola Nokia, Siemens Networks ETRI ETRI Ericsson Ericsson Mr. Janne Peisa

Alcatel-Lucent Motorola Vodafone Group

Panasonic Panasonic HUAWEI Nortel QUALCOMM Europe Alcatel-Lucent Nokia, Samsung, Siemens Networks Nokia, Siemens Networks Siemens Networks IPWireless IPWireless CATT Ericsson, Samsung

Mr. Francesco Grilli Mr. Stanislas Bourdeaut

Mr. Benoist Sébire Mr. Benoist Sébire

Mrs. Haiyang Quan Mr. Janne Peisa

Current minutes of the 57bis TSG-RAN WG2 meeting					
R2-071395	LTE MBMS functionality	Ericsson		Mr. Janne Peisa	
R2-071397	L2 MBMS content synchronization	Ericsson		Mr. Janne Peisa	
	MBMS multi cell SFN transmission over areas of varying inter site				
R2-071411	distance	Ericsson		Mr. Janne Peisa	
R2-071415	Clarification on use of Prioritized Bit Rate (PBR)	NEC			
D0 074400		0		Mr. Himke van der	
R2-071429	E-MBMS architecture	Samsung		Velde Mr. Natarajan	
R2-071/130	LTE MBMS User detection Scheme	Freescale Semiconduct	or Inc	Ivii. Ivatalajali Ekomborom	
R2-071/32	Considerations on MRMS Resource Allocation	Motorola		Ekambaram	
D2 071/32		Motorola			
P2 071451					
R2-071451	LTE MBMS Notifications	LG Electronics Inc.			
P2 071452	Support of scalable codes for E MBMS	Aleatel Lucont			
P2 071466	Transmission of E MBMS control information				
P2 071/69	Audionee measurement for MBMS in LTE	Alcatel Lucent			
P2 071477		TD Toob			
5.13 Cell selection & re-selection, roaming restrictions					
R2-071291	On Intra-LTE Cell Reselection Methods	Ericsson	Mr. Janne	Peisa	
511 (Other LTE Stage 2 subjects				
5.14	JUNEL LI L Glage Z Subjects				
R2-071136	Byte alignment of L2 header	Nokia, Samsun	g, Texas Ins	truments Inc	
R2-071137	PDCP/RLC/MAC header format	samsung			
R2-071138	Variable Size RLC Sequence Number	samsung			
R2-071139	Lite RLC vs. Normal RLC	samsung			
R2-071147	UL HARQ Protocol Issues	Panasonic			
R2-071148	RLC TM Mode for U-Plane	Panasonic			
R2-071149	RLC PDU format for LTE	Panasonic			
R2-071150	MAC PDU format for LTE	Panasonic			

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 R2-071172
 eNB security handling LTE_IDLE -> LTE_ACTIVE

 R2-071173
 Idle mode paging

Samsung Samsung Mr. Gert-Jan van Lieshout Mr. Gert-Jan van

			Lieshout
R2-071187	Byte Alignment for RLC and MAC Headers?	InterDigital NEC, Nokia, Siemens	Mr. Stephen Terry
R2-071249	HARQ-ARQ Interactions	Networks	Mr. Benoist Sébire
R2-071256	Control of UE Measurements for Network Self-configuration and Optimization	Nokia	Mr. Benoist Sébire
R2-071262	Robust MAC signalling	RIM	
R2-071263	Recovery from DRX De-synchronization	RIM	
R2-071287	Solution for sending NAS together with RRC connection request	Ericsson	Mr. Janne Peisa
R2-071297	Clean up of Stage 2 FFS	Ericsson	Mr. Janne Peisa
R2-071302	Support for ROHC in SAE/LTE	Ericsson	Mr. Janne Peisa
R2-071306	Configuration of PDCP in SAE/LTE	Ericsson	Mr. Janne Peisa
R2-071309	Paging procedure in LTE	NTT DoCoMo	
R2-071313	Paging procedure in LTE	NTT DoCoMo	
R2-071314	MAC PDU structure for LTE	NTT DoCoMo	
R2-071315	RI C PDUs for I TE	NTT DoCoMo	
R2-071317	RLC PDUs for LTE	NTT DoCoMo	
R2-071320	Considerations on L1/L2 control signaling	FTRI	
	on share and one there on the signaling	T-Mobile, KPN, China	
		Mobile, Orange, NTT	
	UE support for self-configuration and self-optimisation - Proposal for Stage2 (only RAN2	DoCoMo, Vodafone,	
R2-071329	relevant part)	Sprint, Telecom Italia	Mr. Axel Klatt
R2-071333	Byte alignment for user plane protocols in LTE	Ericsson	Mr. Janne Peisa
R2-071344	NDI-less HARQ operation	Ericsson	Mr. Janne Peisa
R2-071346	HARQ-ARQ Interactions for NACK to ACK error	Ericsson	Mr. Janne Peisa
		Ericsson, NTT	
R2-071357	Resource fragmentation in LTE uplink	DoCoMo, Inc	Mr. Janne Peisa
		Ericsson, Nokia,	
D2 071250	Taxt Drangood for LTE OoS Terminology and Working Assumptions	Samsung, NTT	Mr. Jonno Doino
R2-071336	First Proposal for LTE QOS Terminology and working Assumptions	Alastal Lucent	Mr. Oomon Avdin
R2-071300	Plic MAC Header Fermate	Alcalei-Lucent	Mr. Johns Doiso
R2-071307	RLC-IVIAC fielduel Format	Enceson	IVII. Janne Pelsa
R2-071370	RLC fieader format	Fujitsu	Mr. Himke van der
R2-071374	Radio connection establishment	Samsung	Velde
		Sambarig	Mr. Himke van der
R2-071375	RRC messages and procedures	Samsung	Velde
		0	Mr. Himke van der
R2-071376	RRC specification, way forward	Samsung	Velde
R2-071378	The Urgency of HARQ-ARQ Interactions	ITRI	
R2-071380	Granularity Control on Buffer Reporting	ITRI	
R2-071385	Discussion on Security mode control for LTE	Alcatel-Lucent	

R2-071387	First quantification of UL control
R2-071399	HARQ Configuration for LTE
R2-071408	Voice support in E-UTRAN
R2-071428	Use of home/ private cells
R2-071441	Discussion on MAC PDU structure
R2-071442	Discussion on Uplink Traffic Shaping
R2-071443	On the issue of HARQ/ARQ interaction
R2-071449	Transition indicator for VoIP in UL
R2-071450	ACK to NACK error detecting mechanism
R2-071457	Transmission of LTE Paging
R2-071479	RLC local gap detection
R2-071480	HARQ-ARQ interaction at the receiver
R2-071488	MAC header for control message in LTE
R2-071489	RLC header design
R2-071532	Initial Standardisation Requirements from Self-Organizing Networks
R2-071251	Synchronous adaptive HARQ for E-UTRAN UL
R2-071540	Synchronous adaptive HARQ for E-UTRAN UL

R2-071541 Standardised eNB measurements

R2-071598 EUTRAN Stage 2 Update Will be *agreed by emai*, following the meeting.

5.2.4 BCH for LTE

 R2-071213
 Further details on LTE neighbouring list optimization

 R2-071270
 On the issue of inter RAT neighbouring info reduction

 R2-071290
 Consideration on one-to-all Qoffset
 R2-071401 Summary of BCH for LTE email discussion

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oumbung	
Ericsson	Mr. Janne Peisa
Orange	
	Mr. Himke van der
Samsung	Velde
LG Electronics Inc.	
	Mr. Etienne
Qualcomm Europe	Chaponnière
	Mr. Etienne
Qualcomm Europe	Chaponniere
ASUSTeK	
Motorola	
Vodafone Group	
Nokia	Mr. Benoist Sébire
Nokia	Mr. Benoist Sébire
NTT DoCoMo, KPN,	
Orange, Telecom Italia,	
Telefonica, T-Mobile,	
Vodafone	Mikio Iwamura

Samsung

Nokia

LG Electronics Inc. Mr. Patrick Fischer NEC NTT DoCoMo Ericsson Mr. Janne Peisa

5.3 System Information content & delivery

R2-071142	System information content	Panasonic	
R2-071155	Blacklist Maintenance	HUAWEI	
R2-071156	Neighbour cell reduction using LCV	HUAWEI	
R2-071203	Structure of BCH	QUALCOMM Europe	Mr. Francesco Grilli
R2-071204	Scheduling of D-BCH	QUALCOMM Europe	Mr. Francesco Grilli
R2-07123 4	Cell Access Control	Motorola	
R2-071257	An operator configurable procedure for reading the scheduling units	Nokia	Mr. Benoist Sébire
R2-071259	System Information change indication	Nokia	Mr. Benoist Sébire
	Enabling DL reception of system and control information from Intra -frequency neighbors without gaps in the serving	Texas Instruments	
R2-071266	cell	Inc	
R2-071298	BCH transmission interval in LTE	NTT DoCoMo	
			Mr. Himke van der
R2-071337	System information scheduling and change notification	Samsung	Velde
R2-071339	The life cycle of the cell from UE view	Panasonic	
			Mr. Himke van der
R2-071342	Neighbouring cell information	Samsung	Velde
R2-071343	Notification scheme of SI's Change	CATT	Mrs. Haiyang Quan
			Mr. Himke van der
R2-071377	I me critical system information	Samsung	Velde
R2-071481	System Information Scheduling	Motorola	
R2-071539	Scheduling of System Information	4	ricsson
The docume	nt was revised before presentation in R2 071570:		
D2 074570	Schoduling of Sustam Information	iaaaan	
10/0		1000011	

5.4 Random access procedure

R2-071143 R2-071171 R2-071174	R2-071143 Random Access Preamble signatures usage R2-071171 Pathloss & Size in RACH signature R2-071174 Pathloss & Size in RACH signature		Panasonic Samsung, NTT DoCoMo Samsung	Mr. Gort-Jan van Lioshout Mr. Gert-Jan van
	-	36	č	

			Lieshout
R2-071182	Contention-based scheduling request in LTE_ACTIVE	IPWireless	
R2-071184	RACH procedure(s) in E-UTRAN	IPWireless	
R2-071215	Allocation of a "short" C-RNTI in message 2	LG Electronics Inc.	Mr. Patrick Fischer
R2-071228	Dedicated Random Access Signatures	Motorola	
R2-071230	Random Access Design and Procedure with Dedicated Signatures	Motorola	
R2-071237	RACH Resource Management	Motorola	
R2-071264	Optimized provisioning of RACH in LTE	Texas Instruments Inc	
R2-071265	Content of Message1 and the RACH procedure in LTE	Texas Instruments Inc	
R2-071275	RACH Resource Control	NEC	
R2-071281	message 2 issue in random access procedure	ZTE	Mr. Zhongda Du
R2-071299	Contention-based and contention-free access procedures in LTE	NTT DoCoMo	
R2-071303	Non-contention based RA preamble	ETRI	
R2-071308	RACH backoff control	Siemens Networks	
R2-071316	RACH backoff control	Siemens Networks	
R2-071322	Transport format and power headroom in preamble	LG Electronics Inc.	Mr. Patrick Fischer
R2-071381	On setting the C-RNTI in RACH message two	Siemens Networks	
R2-071384	Discussion on contents of message 3	Alcatel-Lucent, Samsun	g
R2-071386	Contention resolution in aRACH	Samsung	
R2-071422	Random access with dedicated preambles at handover	Ericsson	Mr. Janne Peisa
R2-071446	Clarification and optimization of message 2	LG Electronics Inc.	
R2-071455	Use of dedicated RACH signatures	LG Electronics Inc.	
R2-071456	Discussion on Message 4 in Random Access	LG Electronics Inc.	
R2-071461	RACH signature content	QUALCOMM Europe	
R2-071492	Contention Resolution and Initial Random Access	TD Tech	
R2-071537	Issues on Random Access Procedure	ASUSTeK	Mr. Sam Jiang
R2-071538	Optimization of RACH model	ASUSTeK	Mr. Sam Jiang

5.5 Scheduling (UP and DL contributions)

R2-071135 R2-071165 R2-071176	Concerns on the group scheduling A New Measurement to Support UL Scheduler Operation Handling of AMBR	samsur Mitsubi Samsu DoCoM
R2-071180 R2-071225 R2-071227	Downlink Hybrid ARQ Signaling Performance of Grouping Number of Control Symbols	Samsu Nokia Nokia
		27

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Mr. Gert-Jan van Lieshout Mr. Gert-Jan van Lieshout Mr. Benoist Sébire Mr. Benoist Sébire

eshout

	Group Based Optimization for Signalling of Downlink	
R2-071242	Scheduling	SHARP
R2-071283	Combination of Schedule and frequency hopping	ZTE
R2-071292	Scheduling optimizations – way forward	Ericsson
R2-071345	Enhancement to Buffer Status Reporting	CATT, RITT
R2-071368	Persistent DL Scheduling and VolP	Alcatel-Lucent
R2-071390	Discussion on Uplink Scheduling Request	TD Tech Ltd.
R2-071460	Uplink Scheduling for VoIP	Nokia
R2-071462	Comparison of persistent and group scheduling	QUALCOMM Europ
R2-071483	VolP Performance	Motorola
R2-071484	Text proposal for DL scheduling	Motorola,
R2-071485	Text proposal for UL scheduling	Motorola,
R2-071486	Discussion on scheduling	Motorola,
R2-071533	Response to R2-071225	Motorola
R2-071534	Response to R2-071292	Motorola
		Alcatel-Lucent, CAT
		ETRI, Fujitsu, ITRI,
		Nokia, NTT DoCoM
D0 074505	West Ferring of fee DL Och a dallars	Qualcomm, Samsur
R2-071535	Way Forward for DL Scheduling	Networks, Lexas Ins
		ITPLICE Mitcubie
		NTT DoCoMo, Qual
B2.071536	Way Forward for LIL Schoduling	Samsung Siemens
112 01 1000		earnearig, erennene
		Alcatel Jucent C
		Mitsubishi NEC I
		Qualcomm Sams
R2-071535	Way Forward for DL Scheduling	Instruments
The docume	nt was revised before presentation in R2 071551:	
	1	
		Alcatel-Lucen
		ITRI, Mitsubis
		Panasonic, Q
R2-071551	Way Forward for DL Scheduling	Networks, Te

R2-071536

Way Forward for UL Scheduling

 Attri
 Mr. Zhongda Du

 isson
 Mr. Janne Peisa

 ITT, RITT
 Mr. Haiyang Quan

 atal-Lucent
 Mr. Geman Aydin

 Tech-Ltd.
 Mr. Benoist Sébire

 ALCOMM Europe
 orola

 orola
 orola,......

 orola,......
 orola

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 orola

 stel Lucent, CATT, Elektrobit,

 RI, Fujiteu, ITRI, Mitsubishi, NEC,

 ia, NTT DoCoMo, Panasonic,

 akortka, Toxas Instruments

 Mr. Benoist Sébire

 T, Elektrobit, ETRI, Fujitsu,

 I, LGE, Mitsubishi, NEC, Nokia,

 LocoMo, Oualcomm.

subishi, NEC, Nokia, Qualcomm, nens Networks Mr. Benoist Sóbire

Alcatel-Lucent, CATT, Elektrobit, ETRI, Fujitsu, ITRI, Mitsubishi, NEC, Nokia, NTT DoCoMo, Panasonic, Qualcomm, Samsung, Siemens Networks, Texas Instruments

Alcatel-Lucent, CATT, Elektrobit, ETRI, Fujitsu, ITRI, Mitsubishi, NEC, Nokia, NTT DoCoMo, Panasonic, Qualcomm, Samsung, Siemens Networks, Texas Instruments, Ericsson

CATT, Elektrobit, ETRI, Fujitsu, ITRI, LGE, Mitsubishi, NEC, Nokia, NTT DoCoMo, Qualcomm, Samsung, Siemens Networks

The document was revised before presentation in R2-071552:

R2-071552 Way Forward for UL Scheduling

R2-071462 Comparison of persistent and group scheduling The document was revised before presentation in R2 071554:

R2-071554 Comparison of persistent and group scheduling

5.6 Time alignment principles

R2-071267 R2-071272

On Uplink Synchronization maintenance in LTE On the issue of permanent maintenance of uplink synchronization R2-071400 Uplink synchronization R2-071419 Delivery of TA in LTE_ACTIVE R2-071447 How to transmit TA information

5.7 MIMO support

R2-071260 Efficient CQI feedback

5.8 UE Capabilities

R2-071175 R2-071211 R2-071328 R2-071332

UE Downlink reception capability Framework for UE capability handling in LTE Handling of UE capability information in SAE/LTE Guidelines on the definition of LTE UE classes Samsung QUALCOMM Europe Ericsson T-Mobile, NTT DoCoMo, Mr. Gert-Jan van Lieshout

CATT, Elektrobit, ETRI, Fujitsu, ITRI, LGE, Mitsubishi, NEC, Nokia, NTT DoCoMo, Qualcomm, Samsung, Siemens Networks, Ericson

QUALCOMM Europe

QUALCOMM Europe

Texas Instruments

NTT DoCoMo **IPWireless** LG Electronics Inc.

Inc NEC

HUAWEI

Mr. Janne Peisa Mr. Axel Klatt

R2-071414 Simultaneous Tx/Rx (Duplex) Capabilities of LTE

Telecom Italia, Orange, ChinaMobile, Ericsson, Infincon Technologics, Nokia IPWireless

Samsung

Mr. Himke van der Velde

5.9 E-UTRAN identities

Use of tracking area- and cell identity for private networks/home eclls

5.10 LTE_ACTIVE mobility procedures

R2-071134	Transmission of Scheduling Information for Handover in RRC Dedicated Message	Panasonic	
R2-071252	On the need for forward HO	Nokia	Mr. Benoist Sébire
R2-071372	E-UTRA Measurement Configuration and Control	Ericsson	Mr. Janne Peisa
R2-071398	Idle Gaps for Handover Measurements in E-UTRAN	Ericsson	Mr. Janne Peisa
R2-071463	LTE Intra/Inter-RAT handover algorithms for LTE_ACTIVE state	QUALCOMM Europe	Mr. Francesco Grilli
R2-071255	High level mobility procedure in heterogeneous networks	Nokia	Mr. Benoist Sébire
R2-071258	Mobility uses cases based on the access pipe concept	Nokia	Mr. Benoist Sébire
		NTT DoCoMo, Orange, T	elecom Italia, T-Mobile,
R2-071301	Inter-frequency/RAT mobility control drivers and solutions	Vodafone	

5.10.1 Intra LTE

R2-071144	Measurement Functionality Split for Brodcast and Dedicated	Panasonic	
R2-071157	Admission Control at Target eNB	Nortel	
R2-071160	Redirection scheme in LTE	HUAWEI	
R2-071183	Contention-free Intra-LTE handover in synchronous network	IPWireless	
R2-071188	Minimizing the RACH Procedure Requirement During LTE Handover	InterDigital	Mr. Stephen Terry
R2-071205	Protocol termination for HO signalling	QUALCOMM Europe	
R2-071206	Considerations on RRC re-establishment	QUALCOMM Europe	

R2-071229	Radio Link Failure and Context Recovery	Nokia	Mr. Benoist Sébire
R2-071231	Handover Failure Recovery	Nokia	Mr. Benoist Sébire
		Nokia, Siemens	
R2-071232	Relevant Information for HO	Networks	Mr. Benoist Sébire
R2-071239	Fast and Reliable Handover	Nokia	Mr. Benoist Sébire
R2-071240	Forwarding Instant	Nokia	Mr. Benoist Sébire
R2-071253	Non-Contention Based HO vs. RACH	Nokia	Mr. Benoist Sébire
	Optimized HO method for reducing latencies in UL synchronization and initial UL allocation in E-		
R2-071269	UTRA	Texas Instruments Inc	
R2-071271	Connection Re-establishment	NEC	
R2-071276	HO measurements	NEC	
R2-071282	optimization of handover procedure by using dedicated signature	ZTE	Mr. Zhongda Du
R2-071290	Intra-LTE handover optimization	Ericsson	Mr. Janne Peisa
R2-071318	Gap control in E-UTRAN	Samsung	
R2-071359	Radio link failure	Ericsson	Mr. Janne Peisa
R2-071360	Reliability considerations for the Handover Command	Alcatel-Lucent	Mr. Osman Aydin
R2-071361	RLC status reporting during handover	Alcatel-Lucent	Mr. Osman Aydin
R2-071362	Radio Link Failure and RRC Context Recovery	Alcatel-Lucent	Mr. Osman Aydin
R2-071364	Relevant Information for Handover	Alcatel-Lucent	Mr. Osman Aydin
			Mr. Himke van der
R2-071373	Evaluation of backward handover schemes	Samsung	Velde
R2-071379	Early RACH Access with Reserved Signatures for inter-eNB Handover	ITRI	
R2-071388	UL timing synchronized handover	Samsung	
R2-071402	Mobility during attach	Ericsson	Mr. Janne Peisa
R2-071416	Resource allocations in target cell after Handover	NEC	
R2-071417	Text Proposal for Intra-LTE Handover	NEC	
R2-071431	Support of ROHC and context relocation	NEC	Mr. David Lecompte
R2-071448	Issue on periodic measurement reporting	LG Electronics Inc.	
R2-071459	High Level Comparison of Handover in GSM, UMTS and LTE	QUALCOMM Europe	

5.10.2 LTE to/from UTRAN

Current minutes of the 57bis TSG-RAN WG2 meeting

R2-071201	Text proposal on measurement gap scheduling	QUALCOMM Europe	Mr. Francesco Grilli
R2-071307	Measurement gap control principles	NTT DoCoMo	
R2-071351	Drivers for Inter-RAT Radio Resource Management	Ericsson	Mr. Janne Peisa
R2-071355	Radio Resource Management Aspects of Inter-RAT Handovers	Ericsson	Mr. Janne Peisa
R2-071418	User plane handling in case of IRAT mobility	NEC	
R2-071254	Requirements for redirection in E-UTRAN	Nokia, Telecom Italia	Mr. Benoist Sébire

5.11 LTE_IDLE mobility procedures

 R2-071207
 Camping load balancing in LTE

 Qplimization for Tracking Area Update signalling
 Load balancing solutions for LTE

5.11.1 Intra LTE

 R2-071325
 UE assisted tracking area update

 R2-071403
 Multiple tracking areas concept and influence on paging load

 R2-071494
 Intra-LTE and inter-RAT cell reselection

LG Electronics Inc. Mr. Patrick Fischer NEC NEC

Mr. Janne Peisa

QUALCOMM Europe NTT DoCoMo, T-Mobile, Orange, LG

QUALCOMM Europe

Electronics

5.11.2 LTE to/from other RATs

 R2-071354
 On Inter-RAT Cell Reselection Principles

 Discussion on RAN implications of Equivalent Tracking areas

5.12 LTE MBMS

 R2-071413
 Discussion of eMBMS Uplink Feedback Schemes

 R2-071527
 Definitions relating to SFN in E-MBMS

 R2-071530
 Scheduling of the MCCH

 R2-071531
 UE State during MBMS Reception

NEC Vodafone Group Vodafone Group Vodafone Group

Ericsson

Alcatel-Lucent

5.12.1 Requirements/Scenarios

R2-071226	Uplink Feedback for E-MBMS
R2-071246	MCCH Control
R2-071248	Header Compression in MBMS for E-UTRAN
R2-071278	PTP/PTM radio bearer switching in E-MBMS scenarios
R2-071279	Considerations on uplink feedback channel for E-MBMS
R2-071371	Mapping of MBMS logical channels to DL-SCH
R2-071400	DL-SCH supporting single cell PTM with HARQ/CQI
R2-071435	Over provisioning required to accommodate overlapping SFN areas
R2-071467	Discussion on E-MBMS deployment scenarios
R2-071501	Additional Results on EMBMS Transmission Configurations
R2-071528	MCCH Optimisation for MBMS Enhanced Broadcast

R2-071529 Mobility and Access Control Requirements for LTE Home-eNodeB

5.12.2 Stage 2 inputs

R2-071145	MCCH Transmission in LTE		Panasonic	
R2-071146	Uplink feedback for eMBMS operations		Panasonic	
R2-071158	MBMS Network Optimization		HUAWEI	
R2-071159	Hierarchical MCCH		Nortel	
R2-071202	E-MBMS scheduling		QUALCOMM Europe	4
R2-071217	CQI reporting for E-MBMS AMC		Alcatel-Lucent	4
			Nokia, Samsung, Siemens	
R2-071244	MBMS Agreements		Networks	P
R2-071245	MBMS Definitions		Nokia, Siemens Networks	4
R2-071319	Inter Layer Notification		Siemens Networks	
R2-071326	Layer 1 signalling based user detection for LTE MBMS		IPWireless	
R2-071330	LTE MBMS SFN: Super-frame Based Content Synchronisation		IPWireless	
R2-071347	Counting procedure for LTE MBMS		CATT	4
R2-071369	Multiplexing of MBMS services		Ericsson, Samsung	4
R2-071395	LTE MBMS functionality		Ericsson	4
R2-071397	L2 MBMS content synchronization		Ericsson	4
	MBMS multi cell SFN transmission over areas of varying inter site			
R2-071411	distance		Ericsson	ŧ
		43		

Mr. Janne Peisa

Mr. Francesco Grilli Mr. Stanislas Bourdeaut

Mr. Benoist Sébire Mr. Benoist Sébire

Mr. Benoist Sébire Mr. Benoist Sébire

Mr. Janne Peisa

Mr. Janne Peisa

Mrs. Haiyang Quan Mr. Janne Peisa Mr. Janne Peisa Mr. Janne Peisa Mr. Janne Peisa

Motorola

ETRI ETRI

Ericsson Ericsson Motorola

Group,

Alcatel-Lucent Motorola

Nokia, Siemens Networks Nokia, Siemens Networks

Vodafone Group NTT DoCoMo, Orange, Telecom Italia, Vodafone

R2-071415	Clarification on use of Prioritized Bit Rate (PBR)	NEC	
R2-071429	E-MBMS architecture	Samsung	Mr. Himke van der Velde <u>Mr. Nataraian</u>
R2-071430	LTE MBMS User detection Scheme	Freescale Semiconductor Inc	Ekambaram
R2-071432	Considerations on MBMS Resource Allocation	Motorola	
R2-071433	Multicell EMBMS CQI Feedback	Motorola	
R2-071451	LTE MBMS Transmission	LG Electronics Inc.	
R2-071452	LTE MBMS Notifications	LG Electronics Inc.	
R2-071465	Support of scalable codec for E-MBMS	Alcatel-Lucent	
R2-071466	Transmission of E-MBMS control information	Alcatel-Lucent	
R2-071468	Audience measurement for MBMS in LTE	Alcatel-Lucent	
R2-071477	LTE MBMS Rate Control	TD Tech	

5.13 Cell selection & re-selection, roaming restrictions

R2-071291 On Intra-LTE Cell Reselection Methods

5.14 Other LTE Stage 2 sunjects

R2-071136	Byte alignment of L2 header	Nokia, Samsung, Texas	Instruments Inc
R2-071137	PDCP/RLC/MAC header format	samsung	
R2-071138	Variable Size RLC Sequence Number	samsung	
R2-071139	Lite RLC vs. Normal RLC	samsung	
R2-071147	UL HARQ Protocol Issues	Panasonic	
R2-071148	RLC TM Mode for U-Plane	Panasonic	
R2-071149	RLC PDU format for LTE	Panasonic	
R2-071150	MAC PDU format for LTE	Panasonic	
R2-071172	eNB-security-handling_LTE_IDLE -> LTE_ACTIVE	Samsung	Mr. Gert-Jan van Lieshout Mr. Gert-Jan van
R2-071173	Idle mode paging	Samsung	Lieshout
R2-071187	Byte Alignment for RLC and MAC Headers?	InterDigital	Mr. Stephen Terry
R2-071249	HARQ-ARQ Interactions	NEC, Nokia, Siemens	Mr. Benoist Sébire

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Mr. Janne Peisa

Ericsson

	, , , , , , , , , , , , , , , , , , ,	Networks	
R2-071256	Control of UE Measurements for Network Self-configuration and Optimization	Nokia	Mr. Benoist Sébire
R2-071262	Robust MAC signalling	RIM	
R2-071263	Recovery from DRX De-synchronization	RIM	
R2-071287	Solution for sending NAS together with RRC connection request	Fricsson	Mr. Janne Peisa
R2-071297	Clean up of Stage 2 FFS	Ericsson	Mr. Janne Peisa
R2-071302	Support for ROHC in SAE/LTE	Ericsson	Mr. Janne Peisa
R2-071306	Configuration of PDCP in SAE/LTE	Ericsson	Mr. Janne Peisa
R2-071309	Paging procedure in LTE	NTT DoCoMo	
R2-071313	Paging procedure in LTE	NTT DoCoMo	
R2-071314	MAC PDU structure for LTE	NTT DoCoMo	
R2-071315	RLC PDUs for LTE	NTT DoCoMo	
R2-071317	RLC PDUs for LTE	NTT DoCoMo	
R2-071320	Considerations on L1/L2 control signaling	ETRI	
		T-Mobile, KPN, China	
		Mobile, Orange, NTT	
	UE support for self-configuration and self-optimisation - Proposal for Stage2 (only RAN2	DoCoMo, Vodafone,	
R2-071329	relevant part)	Sprint, Telecom Italia	Mr. Axel Klatt
R2-071333	Byte alignment for user plane protocols in LTE	Ericsson	<u>Mr. Janne Peisa</u>
R2-071344	NDI-less HARQ operation	Ericsson	<u>Mr. Janne Peisa</u>
R2-071346	HARQ-ARQ Interactions for NACK to ACK error	Ericsson	<u>Mr. Janne Peisa</u>
		Ericsson, NTT	
R2-071357	Resource tragmentation in LTE uplink	DoCoMo, Inc	Mr. Janne Peisa
		Enceson, Nokia,	
D2 071359	Taxt Proposal for LTE OoS Terminology and Working Accumptions		Mr. Janna Boisa
R2-071366	Further Requirements for the COL Feedback	Alcatel-Lucent	Mr. Osman Avdin
R2-071367	RI C-MAC Header Formats	Fricsson	Mr. Janne Peisa
R2-071370	RIC header format	Euliteu	
112 07 107 0		rujitu	Mr. Himke van der
R2-071374	Radio connection establishment	Samsung	Velde
		-	Mr. Himke van der
R2-071375	RRC messages and procedures	Samsung	Velde
		_	Mr. Himke van der
R2-071376	RRC specification, way forward	Samsung	Velde
R2-071378	The Urgency of HARQ-ARQ Interactions	HRI	
R2-071380	Granularity Control on Buffer Reporting	ITRI	
R2-071385	Discussion on Security mode control for LTE	Alcatel-Lucent	
R2-071387	First quantification of UL control	Samsung	
R2-071399	HARQ Contiguration for LTE	Ericsson	Mr. Janne Peisa
R2-071408	Voice support in E-UTRAN	Orange	

•			
			Mr. Himke van der
R2-071428	Use of home/ private cells	Samsung	Velde
R2-071441	Discussion on MAC PDU structure	LG Electronics Inc.	
R2-071442	Discussion on Uplink Traffic Shaping	LG Electronics Inc.	
R2-071443	On the issue of HARQ/ARQ interaction	LG Electronics Inc.	
R2-071449	Transition indicator for VoIP in UL	LG Electronics Inc.	
R2-071450	ACK to NACK error detecting mechanism	LG Electronics Inc.	
R2-071457	Transmission of LTE Paging	LG Electronics Inc.	
			Mr. Etienne
R2-071479	RLC local gap detection	Qualcomm Europe	Chaponnière Mr. Etienne
R2-071480	HARQ-ARQ interaction at the receiver	Qualcomm Europe	Chaponnière
R2-071488	MAC header for control message in LTE	ASUSTeK	
R2-071489	RLC header design	Motorola	
R2-071532	Initial Standardisation Requirements from Self-Organizing Networks	Vodafone Group	
R2-071251	Synchronous adaptive HARQ for E-UTRAN UL	Nokia	Mr. Benoist Sébire
R2-071540	Synchronous adaptive HARQ for E-UTRAN UL	Nokia	Mr. Benoist Sébire
		NTT DoCoMo, KPN,	
		Orange, Telecom Italia,	
		Telefonica, T-Mobile,	
R2-071541	Standardised eNB measurements	Vodafone	Mikio Iwamura

6 FDD Enhanced Uplink: inputs on the two "open issues" discussed in Saint Louis

R2-071277 Email discussion summary on two open issues on EDCH serving grant update The document was presented by Jinsock Lee from NEC. Discussion: Decision: The document was noted. No action are needed for those two issues. CR 25.321 Rel-6 R2-071189 "Maximum_Serving_Grant" setting at TTI change The document was presented

Discussion: There are two table with the introduction of the 64qam, so two references. What are the consequences if not approved ? Rel-6 implementation will be allowed.

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Panasonic

Email rapporteur (NEC)

Current minutes of the 57bis TSG-RAN WG2 meeting
Decision: There will be a Rel-7 CR. Agreed in principle. 25.321 CR number 0317.

 R2-071222
 Correction on E-TFC selection and Serving Grant
 CR
 25.321
 Rel-6
 Alcatel-Lucent

 The document was presented by Cyrille Royer from Alcatel-Lucent.
 Discussion:
 How how many bits to use for the serving grant ?
 How to calculate the power ratio in RAN WG1?
 How to calculate the power and the context of the contex

7 Enhanced Cell_FACH State in FDD

7.1 Incoming LSs

R2-071515 (R1-071254, to RAN2). Reply LS (to R2-070419) on HS-SCCH enhancements in CELL_FACH The document was presented by Juho Pirskanene from Nokia.	RAN WG1	Nokia
Discussion: Question 4: two questions were asked. Only the first one was answered. The option to use undefined code points still new Decision: The document was noted.	ds to be answer	red.
R2-071582 (R1-071779, to RAN2). Reply LS (to R2-070409) on HS-DSCH usage in CELL_FACH The document was presented by Richard Burbidge (vice Chairman). Discussion: Decision: The document was noted.	RAN WG1	
7.2 Inputs		
R2-071152 Enhanced CELL_FACH state in FDD in 25.301 The documents was presented by Juho Pirskanen from Nokia. Discussion:	CR 25.30	1 Nokia

Subclause 5.3.1: Second change, MAC-ehs entity should be used (will be updated to the new version of the specification anyhow). End of subclause 5.3.1: RAN3 decision may lead to a change here: MAC-hs assembles data blocks also coming from DTCH in Cell_FACH, Cell_PCH and URA_PCH States.

Decision: The CR was agreed in principle. 25.301 CR number 0084.					
R2-071153 Enhanced CELL_FACH state in FDD in 25.302 The documents was presented by Juho Pirskanen from Nokia.			CR	25.302	Nokia
Clause 6: It was clarified that the sentence "one paging indicate dchannel is associated ()" does not a Subclause 8.2, configuration 30 needs to be corrected (columns do not match, in fact it is always more Subclause 7.2: "Zero, one or more physical downlink shared channel". Zero may not have to be inclue Decision: The CR was agreed in principle. 25.302 CR number 0179.	lescril e than led (su	be a separate F one). uch as in the p	PICH. revious	sub-clause).	
R2-071162 Enhanced CELL_FACH in FDD in 25.304 The documents was presented by Juho Pirskanen from Nokia. Discussion:			CR	25.304	Nokia
Subclause 8.2b seems to make the Cell_FACH enhancement mandatory for the UE. But the final deci Decision: The CR was agreed in principle. 25.304 CR number 0156.	sion o	n optional/ma	ndatory	is not taken yet	
R2-071163 Enhanced CELL_FACH in FDD 25.321 The document was revised before presentation in R2-071555:	CR	25.321	Nokia		
R2-071555 Enhanced CELL_FACH in FDD 25.321 The document was presented by Juho Pirskanen from Nokia. Discussion: Subclauses 9.2.1.1a and 9.4: titles may be incorrect. An alternative would be to use a new subclause. Subclause 11.6: it is not totally clear that this applies to FDD only (see e.g. subclause 1.6.1.1). Subclause 6.2.1, last column: there is no HARQ in the enhanced Cell_FACH State. Subclause 1.2.1.1a: the bullet point description needs to be clarified (with regards to e.g. what needs t Decision: The CR was agreed in principle. 25.321 CR number 0318.	CR o be in	25.321 ncluded).	Nokia		
R2-071164 Enhanced CELL_FACH in FDD 25.331 The document was revised befor epresentation in R2-071556:	CR	25.331	Noł	kia	
R2-071556 Enhanced CELL_FACH in FDD 25.331 The document was presented by Markus Wimmer from Siemens. Discussion: The exact support needs to be clarified	CR	25.331	Netwo	siemens rks	

The exact support needs to be clarified.

Current minutes of the 57bis TSG-RAN WG2 meeting

Current minutes of the 57bis TSG-RAN WG2 meeting					
Subclause 8.3.1.6: it is not totally clear that this applies to FDD only. Subclause 8.1.1.6.6: still refers to the downlink hs-pdsch SI for connected mo The are different information (independent configurations) possible between <i>configuration only will be used, and will be applicable to both ilde and conne</i> There are still some MAC-ehs.	de. Needs to be corrected. idle and connected mode in t ected.	he docume	ent. After	discussion	ns, <i>SIB5</i>
Subclause 10.3.6.y.y: The sentence stating the the UTRAN should use the firs Subclause 8.5.11: FDD/TDD applicability needs to be clarified (e.g. the begin Decision: The document was noted.	st index needs to be clarified nning of the subclause is for l	(as it may FDD only)	be under:	stood as th	he first code itself).
R2-071495 Introduction of Enhanced CELL_FACH state: Direct data transmiss The document was presented by Markus Wimmer from Siemens. Discussion:	ion to the UE in CELL_PCH sta	ite	CR 25	5.331 1	Nokia, Siemens Network
Subclause 8.5.ph: If the UTRAN does not get the RACH message, the UE co Subclause 8.5.ph seems to refer to the paging subclause, while the two are no 10.3.6 na (<i>xy</i>)	uld be in Cell_FACH while t t configured together.	he UTRA!	N believe	s the UE i	s in Cell_PCH.
Subclause 8.6.3.1b: The new bullet point should be after the clause dealing w State ?	ith CRNTI inclusion. Also, th	his is FDD	only. W	hat about	the URA_PACH
Subclauses 7.2.2.1 / 7.2.2.3 / 8.3.1.6: conflict on information required to be re Decision: The document was noted.	eccived by the UE.				
R2-071496 Introduction of Enhanced CELL_FACH state: mapping of the PCCI The document was presented by Markus Wimmer from Siemens.	H to HS-DSCH		CR	25.33	Nokia, Siemens 1 Networks
Discussion: The CR will be revised for the optionality/mandatory support of the feature. Subclause B.3.3: last added paragraph. "selected DSCH" (in the DRx sentence However, in TS 25.211, the association (of PICH with HS-SCCH) is describe Making the disctinction new/old requirements (before the mode distinctions) visibility on the common part. Subclause 8.5.pd: second line and title: typos. Decision: The document was noted.	e) may be incorrect. HS-SCC d. would avoid the duplication (CH monitor	ring after requireme	receiving	the PICH is not clear.
Quality reporting					
R2-071216 Configuration of RACH measurements in HS-FACH	40	CR 2	5.308 Re	el-7 Alo	catel-Lucent
	40				

Current minutes of the 57bis TSG-RAN WG2 meeting		
The document was presented by Stanislas Bourdaut from Alcatel-Lucent. Discussion:		
Decision: The CR was agred in principle and will be merged with any additional update on the subject	ct. 25.308 CR number 0020.	
R2-071391 Feedback of Channel Quality The document was presented by Paul Bucknell from Philips. Discussion: Decision: The document was noted.		Philips
R2-071404 UL reporting rate for DL quality measurements in CELL_FACH The document was presented by Juho Pirskanen from Nokia. Discussion: Subclause 3.1: which error performance was meant ? Decision: The document was noted.		Nokia
R2-071191 Need for additional quality reporting in Enhanced CELL_FACH The document was presented by Janne Peisa from Ericsson. Discussion: Decision: The document was noted.		Ericsson
R2-071453 Channel Quality Reporting on RACH The document was presented by Seung June Yi from LG Electronics. Discussion: Decision: The document was noted.	LG Electronics Inc.	
R2-071454 Triggering of CQ Reporting on RACH (Based on CQI reporting decision).	LG Electronics Inc.	
Conclusions (source: Chairman of the session):		
Need for quality updates in CELL_FACH needed? -> No (should not rely on CELL_FACH for long camping)		
Need for quality report for PCH->FACH initiated by UL DTCH transmission?		

-> Yes (should have this as we have quality report for case that first message is on CCCH)

Need for channel quality for DL DTCH in PCH state? -> No strong need - but similar functionality may be needed for other reasons

Report in UL MAC header or RRC or layer 1? -> MAC (in a new lower MAC terminated in Node B): LG -> RRC: Nokia, Ericsson, Motorola, Infinion, Qualcomm -> Layer 1: Philips, ALU RRC reporting agreed

Type of report RSCP, Ec/Io, CQI or something new (#tx)? Same as already included in RRC reports

DRX:		
R2-071161 Discontinuous reception in CELL-FACH The document was presented by Sherry Zheng from Huawei. Discussion: Decision: The document was noted.	25.304	HUAWEI
R2-071190 Solution for optimizing the UE battery life in Enhanced CELL_FAC The document was presented by Janne Peisa from Ericsson. Discussion: Could the DRx of Cell_FACH and CPC not use the same periods, for simplic Decision: The document was noted.	H ity ? CPC values would have to be ex	Ericsson tended.
R2-071403 Discontinous reception in CELL_FACH The document was presented by Juho Pirskanen from Nokia. Discussion: Decision: The document was noted.		Nokia
R2-071427 Enhanced CELL_FACH and power saving The document was presented by David Lecompte from NEC	51	NEC

Discussion: Decision: The document was noted. R2-071557 DRx Schemes comparison Nokia The document was presented by Juho Pirskanen from Nokia. Discussion: Question on the choice of the operating points. There are two ways to improve battery consumption. Decisions: - DRx scheme will not be introduced in Cell_FACH. - No new mechanism for FACH to PCH transition will be introduced (Cell FACH is a transition state). - Multilevel DRx will be introduced in PCH State. - PCH to FACH trigger for transition will be: uplink data on dcch or dtch. (Downlink data on dcch or dtch do not trigger transfer from PCH to FACH state). - An HS-SCCH triggers an RRC measurement report. Configured by UTRAN as cell-specific configuration (the need for UE specific configuration is tbd). **CELL/URA PCH:** R2-071504 Principles for the new CELL_PCH/URA_PCH operation QUALCOMM Europe, Vodafone The document was presented by Francesco Grilli from Qualcomm. Discussion: This was not yet submitted to RAN WG1. Could not the SIB or reconfiguration change the R'99 paging, as an alternative ? This is removing one code, but adding one HS-SCCH. **Decision:** RAN WG1 will be consulted for the feasibility/complexity, highlighting on the paging. An LS will be sent in R2-071584 (Qualcomm). R2-071340 Improved network load control for CELL/URA_PCH states Nokia The document was presented by Juho Pirskanen from Nokia. Discussion: It was clarified that the difference between the "wait_time proposal" and the retransmission scheme is that the cell update retransmission increases the probability that the UE misses the cell update confirm. Also, the Wait_Indication can be controlled by the network. Decision: The document was noted. Proposal 1, wait time in Cell Update confirm, was agreed for the Rel-7 (TDD mode TBD). Proposol 2, existing redirection in RRC connection release can be used, was agreed. R2-071185 Reordering in Enhanced Cell FACH InterDigital Mr. Stephen Terry The document was presented by Paul Marinier from Interdigital. 52

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Discussion:

Removing the reordering function for some logical channels would be an alternative. **Decision:** The document was noted. The problem needs to be solved.

8 Improved L2 support for high data rates

R2-071192 Open issues for Improved L2 support of high data rates The document was presented by Janne Peisa from Ericsson.				Ericss	son				
Rel-6 RLC with MACe-hs, or RLC-flexible-PDU-size with MACe-hs ? This should be added as an open issue. The maximum length of the length field is 11 bits.									
<i>RLC format:</i> No agreement to change the RLC format so far. <i>MAC:</i> The four header fields were agreed. Those four header fields will be present for	or each SDU.								
Indication of the end of the header needs to be clarified.									
Decisions: 1- <i>RLC format:</i> No agreement to change the RLC format so far. 2- <i>MAC:</i> The four header fields were agreed. Those four header fields will be presen	nt for each SDU.								
3- TSN size agreed: 6 bits.									
4- The maximum length of the length field is 11 bits.									
5- Indication of the end of the header needs to be clarified.									
R2-071196 L2 enhancements: Baseline CR to MAC The document was presented by Janne Peisa from Ericsson. Discussion: Subclause 4.2.3x: mapping should be added also for the UTRAN side. Decision: This will be considered as the baseline 25.321 CR on the subject.	CR	25.321	Rel-7	Ericss	son				
R2-071586 L2 enhancements: Baseline CR to MAC		CR	25.321	Rel-7	Ericsson				
R2-071197 L2 enhancements: Baseline CR to RLC	CR	25.322	Rel-7	Ericss	son				

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The document was presented by Janne Peisa from Ericsson. Discussion:				
Subclause 11.3.4.10: the handling may not be apropriate in the case of flexible PDU size. The maximum value of the maximum RLC PDU size should be known by the UE. Decision: This will be considered as the baseline 25.322 CR on the subject.				
R2-071198 L2 enhancements: Draft CR to RRC The document was presented by Sven Ekemark from Ericsson. Discussion: Decision: This will be considered as the baseline 25.331 CR on the subject.	CR	25.331	Rel-7	Ericsson
R2-071194 Optimization to the baseline MAC-ehs header The document was presented by Janne Peisa from Ericsson. Discussion: Deicsion: The document was noted.				Ericsson, AsusTek, Interdigital, Huawei, ZTE
R2-071268 Enhanced MAC-hs header optimization The document was presented by Chengyu Yu from Huawei. Discussion: Same header for dedicated and cell_FACH was decided. Decision: The document was noted.				HUAWEI
R2-071392 MAC-ehs header structure The document was presented by Paul Bucknell from Philips. Discussion: Decision: The document was noted.				Philips
R2-071405 On MAC-ehs header structures The document was presented by Juho Pirskanen from Nokia. Discussion: Decision: The document was noted.				Nokia
R2-071490 Enhanced MAC-hs header optimization The document was presented by Elliot Jen from ASUSTeK. Discussion: Decision: The document was noted.				ASUSTeK

R2-071542 Flexible MAC-hs Format The document was presented by SungDuck from LG Electronics. Discussion: One header format, byte aligned, was agreed before. Decision: The document was noted.	LG Electronics Inc.
R2-071195 RLC optimization for Improved L2 The document was presented by Janne Peisa from Ericsson. Discussion: Decision: The document was noted. There is support for the proposal. There is support for the proposal. Ericsson, Nokia, Samsung, Qualcomm, ALU, Siemens, VF, LG, Motorola, T-Mobile, TIM Object: ASUSTeK CRs independent from the Improved L2 will be prepared (Ericsson, Nokia, Siemens).	Ericsson, Nokia, Samsung
R2-071487 RLC header optimization with flexible PDU size The document was revised before presentation in R2-071585: R2-071585 RLC header optimization with flexible PDU size The document was presented by Sam Jiang from ASUSTeK. Discussion: Proposal 3: - Asustek, Proposal 3+: - LG Decision: Proposal 1: Not agreed. Proposal 2: Not agreed. 7/15 bits LI, configured by RRC, remain.	ASUSTeK ASUSTeK
R2-071140 L2 header optimization for HSPA+ The document was presented by () from Samsung. Discussion: Decision: The document was noted.	Samsung

R2-071543 Discussion on RLC Length Indicator The document was presented by SungDuck from LG Electronics. Discussion: Decision: The document was noted.			LG Electronics Inc.
R2-071470 L2 Improvements and polling The document was presented by Etienne Chaponniere from Qualcomm. Discussion: Decision: The document was noted.			Qualcomm Europe
R2-071193 Configuration of the Enhanced RLC protocol The document was presented by Janne Peisa from Ericsson. Discussion: Decision: The proposal was agreed. RLC re-establishment needed or not when reconfiguration fr	om flexible	to fixed	Ericsson is ffs.
R2-071472 L2 improvements - configuration	Qualcom	m Europe	Mr. Etienne Chaponnière
R2-071471 L2 improvements and UE processing The document was presented by Etienne Chaponniere deom Qualcomm. Discussion: Decision: The document was noted. The two limitations are required.			Qualcomm Europe
R2-071587 MAC-ehs header: summary and open issues The document was presented by Janne Peisa from Ericsson. Discussion: Decision: This was agreed as the new baseline.			Ericsson
R2-071198 L2 enhancements: Draft CR to RRC CR	25.321	Rel-7	Ericsson
R2-071186 Mobility and Interworking Between R6 and R7 This document was revised before presentation in R2-071568:			InterDigital

Current minutes of the 57bis TSG-RAN WG2 meeting R2-071568 Mobility and Interworking Between R6 and R7

InterDigital

Nokia

LG Electronics Inc., IP Wireless

For remaining documents, companies were asked to provide comments off-line to the authors.

9 MBMS FDD Physical layer Enhancements

R2-071331 MBMS FDD and TDD Physical Layer Improvements

The document was presented by Patrick Fischer from LG Electronics. Discussion:

It was clarifed that SIB11bis was excluded on purpose. In SIB11, for the interfrequency case, only frequencies are indicated, not the full list of neighbour cells. On an MBMSFN cell, the SIB11 only contains neighbour cell information for MBMSFN cells.

What about the application layer coding ? For the selection of the SFN frequency, the equivalent PLMN concept may be added. **Decision:** The document was noted. The proposals in the document were agreed in principle, except the list below: - cell (re-)selection to be discussed in the Nokia document R2-071420

- UE cap. aspects to be confirmed with RAN1.

MBMS SFN Operation Principles

The document was presented by Juho Pirskanen from Nokia.

- for FDD DRX proposal based on TFCI to be confirmed.
 Additionally, agreed that EPLMNs can be used to determine suitability of SFN cell.

Discussion: Decision: The document was noted. The Minimum MBMS service area size is an MBMSFN cluster. Neighbour inter frequencies (but not PSC) and need to perform periodic MCCH reading on neighbour is indicated on MBSFM carrier. Neighbour intra-frequency clusters (PSC) can be given by the network. SIB11 only. Agreed items:

Proposals A, B, C, D.

R2-071420

Question 3.1: cluster (re-) selection left to UE implementation. To be captured in stage 2 if necessary

An LS will be sent to RAN1/4, to inform them on the decision not to specify cluster (re-)selection criteria (no action for them). In R2-071589 (LG Electronics).

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R2-071409 UE capabilities for MBSFN The document was presented by Juho Pirskanen from Nokia. Discussion: Decision: The document was noted.						Nokia	
R2-071334 MBMS FDD and TDD Physical Layer Improvements The document was presented by Patrick Fischer from LG Electronics. Discussion: Decision: The document was noted.			CR	25.331	Rel-7	LG Electronic	es Inc., IP Wireless
R2-071334 MBMS FDD and TDD Physical Layer Improvements The document was presented by Patrick Fischer from LG Electronics: Discussion: For any optional IE not included, the UE behaviour will be stated as not spec For any mandatory IE not included, the UE behaviour will be to ignore it. Decision: This wil be considered as the baseline CR.	ified.		CR	25.331	Rel-7	LG Electronic	es Inc., IP Wireless
R2-071338 MBMS FDD and TDD Physical Layer Improvements The document was presented by Patrick Fischer from LG Electronics: Discussion: Decision: This wil be considered as the baseline CR.			CR	25.304	Rel-7	LG Electronic	s Inc., IP Wireless
R2-071336 MBMS FDD and TDD Physical Layer Improvements The document was presented by Patrick Fischer from LG Electronics: Discussion: Decision: The document was noted.			CR	25.306	Rel-7	LG Electronic	s Inc., IP Wireless
R2-071335 MBMS FDD and TDD Physical Layer Improvements R2-071336 MBMS FDD and TDD Physical Layer Improvements	CR CR	25.346 25.306	Rel-7 Rel-7	LG E Wire LG E Wire	lectronics I less lectronics I less	nc., IP nc., IP	Mr. Patrick Fischer Mr. Patrick Fischer

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10 MBMS TDD Physical lay	/er Enhancemer	nts							
R2-071500 UE Capabilities for TDD MBSFN			IPW	IPWireless					
11 MBMS LCR TDD Physic	al layer Enhanc	ements							
R2-071327 LCR TDD physical layer enhancements t The document was revised before presentation i R2	ext proposal for TR 25.905 -071581:		TD-	Tech					
R2-071581 LCR TDD physical layer enhancements t The document was presented by () from TD-Tech Discussion: Most of the text concerns RAN WG1. Changes in other subclauses would be needed. Decision: The document was noted. We will wait for	ext proposal for TR 25.905 or the feedback from RAN	WG1.			TD-Tech				
12 GNSS in UTRAN									
No input.									
13 1.28 Mcps TDD Enhanc	ed Uplink								
Addition of signature sequence group info related to non-scheduled transmisson in R2-071497 Some Small Editorial Corrections to TS 2	ormation for the E-HICH 1.28Mcps TDD mode 5.321	CR 25.331 CR 25.321	Rel-7 Rel-7	CATT, TD-TECH, ZTE CATT	Mrs. Haiyang Quan Mrs. Haiyang Quan				
	:	59							

14 TEI7 Incoming LSs: R2-071522 (R3-070484, to RAN2). LS on MBMS Session Update of the MBMS Service Area RAN WG3 The document was presented by Jubo Pirskapen from Nakia	
Incoming LSs: R2-071522 (R3-070484, to RAN2). LS on MBMS Session Update of the MBMS Service Area RAN WG3 The document was presented by Jubo Pirskanen from Nokia	
R2-071522 (R3-070484, to RAN2). LS on MBMS Session Update of the MBMS Service Area RAN WG3	
Discussion:	
Decision: The document was noted. Nokia and Siemens will provide the CRs for the next meeting.	
R2-071524 (RP-070268, to RAN2). LS on Removal of limitation of SRNC identity TSG RAN The document was presented by Agnes Revel from Motorola.	
R2-071341 (Nokia) is a related document. Decision: The document was noted.	
R2-071526 (IETF RoHC WG Chair). Reply LS (to R2-070434) on Questions regarding the ROHC Protocol IETF RoHC W The document was presented by Juho Pirskanen from Nokia. Discussion:	NG Chair
Decision: The document was noted.	
R2-071476 Handling AMD PDU outside the reception window CR 25.322 Rel-7 ASUSTeK Mr. Sam Jia R2-071478 Improvement of RLC reset procedure CR 25.322 Rel-7 ASUSTeK Mr. Sam Jia	ang ang
R2-071482 Relocation CR 25.331 Rel-7 ASUSTEK	
Note: All CRs "agreed in principle" at RAN2-57bis will have to be re-presented at RAN2-58.	
R2-071131 Use of Integrity protection algorithm UIA/2: removal of a 'shall' in a note CR 25.331 Rel-7 ETSI MCC The document was presented by Claude Arzelier from ETSI MCC. Discussion: CR 25.331 Rel-7 ETSI MCC	
Decision: Agreed in principle, 25.331 CR number 2992.	

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R2-071141 Removing an incomplete optimization for RLC operations during HSDPA cell change The document was presented by Kyeong in Jeong from Samsung.	Samsung, Ericsson
 Discussion: This would have impact on 25.321 as well. This would make the Rel-7 behaviour different than the one of for earlier releases, while leg to be handled anyway. Would there be any legacy issues (Alcatel-Lucent) ? Would earlier implementation be possible ? Decision: The document was noted. Potential legacy issues may be checked. The document will be seen again on the Thursday. On the Thursday, the Rel-7 CR was agreed in principle. 25.322 CR 0306. The potential addition of the sentence on earlier implementable coversheet will be discussed at the next meeting. 	acy UEs would have ility on the
R2-071154 Mobile TV mode switching Delay optimization The document was presented by Sherry Zheng Yu from Huawei. Discussion:	HUAWEI
It was commented by the presenter's company that an SA4 LS stated that the application startup time may be large, which would justify Decision: The document was noted.	some optimisations.
R2-071166 T305, CELL FACH & SRNC RELOCATION The document was presented by Johan Johansson from Huawei. Discussion: Would the alternative of having common T305 values for all RNCs in the network (Motorola) be really possible ? The use of Network mobility signalling to modify T305 seems preferable. Decision: This will be included in the SRNS Relocation container. Huawei will prepare a CR for RAN2-58.	HUAWEI
R2-071208 Marooned UE in "Camped on any cell" The document was presented by Nathan Tenny from Qialcomm. Discussion: Decision: The document was noted.	QUALCOMM Europe
R2-071209 Changeable Parameters in UE Capability The document was presented by Nathan Tenny from Qualcomm. Discussion: What a Rel-7 UE in a Rel-6 network ? What if the UE capability change is a downgrade that conflicts with the QoS requirement ? - Details of what can be changed may allow to move forward on this issue.	QUALCOMM Europe Nokia

Current minutes - What may/sh - What should Decision: The	of the 57bis TSG-RAN WG2 meeting ould thenetwork do in this case ? the UE do if the network does nothing ? document was noted.				
R2-071212 The document Discussion:	PDCP variables handling at SRNS relocation was presented by Stanislas Bourdeaut from Alcatel-Lucent.	CR	25.323		Alcatel-Lucent
Decision: The	CR was agreed in principle (sentence on earlier implemtability will be added on the coversheet). 25.32	3 CR nu	mber 0302	2.
R2-071218 The document Discussion:	Cell identifier encoding alignment was presented by Stanislas Bourdeaut from Alcatel-Lucent.	CR	25.331	Rel-7	Alcatel-Lucent
Radius Cell Id needs to be included in the definition. RAN WG3 is discussing the RNC Id bits. Hence, refering the RAN3 associated specification may be better instead. Decision: An LS will be sent to RAN3. The CR was agreed in principle. 25.331 CR number 2993.					
R2-071311 The document Discussion :	Correction to signalling connection release at T314/315 expiry was presented by Agnes Revel from Motorola.	CR	25.331	Rel-7	Motorola
The note is mentioned in the coversheet, but note in the CR (this should be removed from the coversheet). Decision: The CR was agreed in principle. 25.331 CR number 2994.					
R2-071312 The document Discussion:	Cell Update Confirm with RLC re-establish indicator was presented by Agnes Revel from Motorola.	CR	25.331	Rel-7	Motorola
This situation has been in the specifications since the R'99. This will be added in the coversheet. Decision: The CR was agreed in principle. 25.331 CR number 2995.					
R2-071321 The document Discussion:	Correction of STTD Indicator for F-DPCH Tx Diversity was presented by Sven Ekemark from Ericsson.	CR	25.331	Rel-7	Ericsson
Decision: The CR was agreed in principle. 25.331 CR number 2996.					
R2-071323 R2-071324	Introduction of GAN PS handover Introduction of GAN PS handover	CR CR	25.306 25.331	Rel-7 Rel-7	Ericsson Ericsson
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The document was presented by Sven Ekemark from Ericsson.			
Discussion: GERAN has introduced information on support in the (UE) classmark 3.			
Inter-RAT PS Handover was specified in the Rel-6.			
Decision: An LS will be sent of GERAN to enquire because the linkage between the various intersyste	em/intermode l	nandovers. Ir	1 R2-071569 (Juho).
Later-on, CKs agreed in principle. CK numbers 0156 (25.306) and 2997 (25.331). The LS to GERAN (R2-071569) was withdrawn as a consequence.			
R2-071341 Extension of RNC-ID			Nokia
Diseussion			
Decision: This was agreed in principle. An LS will be sent to RAN3, in R2-071571.			
R2-071288 Feature Clean Up: Removal of DRAC leftover	CR	25.331	Siemens Networks
Discussion:			
Decision: The CR was agreed in principle. 25.331 CR number 2998.			
R2-071352 S-CCPCH and PCH channel selection for Band IV or Band IX or Band X	CR	25.304	Siemens Networks
The document was presented by () from Stemens.			
Decision: The CR was agreed in principle. 25.304 CR number 0157.			
R2-071353 Initialisation of CFN calculation for CELL_FACH	CR	25.331	Siemens Networks
The document was presented by () from Siemens.			
Discussion: Decision: The CR was agreed in principle. 25.331 CR number 2999.			
R2-071410 Pino-pond control			Nokia, 3, Ericsson, Motorola
The document was presented by Simone Provvedi from Nokia.			Motorola
Discussion:			
The CR is meant to be for the Rel-7, but that it would be possible that a Rel-6 UE implement it.			
A default value should be stated.			
The parameter would not be applied for the switch-on case.	and instand		
The application of the offset is meant to be mandatory.	ised instead.		

Current minutes of the 57bis TSG-RAN WG2 meeting Parameter values/ranges need to be further discussed. Would an earlier implementation be possible ? Would there be any impacts to idle mode testing ? Probably not, as implementation will be possible. Decision: The CRs werewas agreed in principle. 25.331 CR 3000. 25.304 CR 0158.	this is a Re	el-7 featur	e. Rel-6
Optimization of switching beteween MBMS broadcast TV channels transmitted on ptp bearers CR R2-071424 (MBMS for Mobile TV) CR The document was presented by David Lecompte from NEC. Discussion: CR Decision: The CR was agreed in principle.25.331 CR number 3001. CR	25.331	Rel-7	NEC, Ericsson
R2-071425 Alignment of tabular to ASN.1 for SIB11/SIB12 and event 1J CR The document was presented by David Lecompte from NEC. Discussion: Discussion: Decision: The CR was agreed in principle. 25.331 CR number 3002.	25.331	Rel-7	NEC
R2-071426 Correction of Out of Sequence Reception function CR The document was presented by David Lecompte from NEC. Discussion: 'greater than or equal to' should be used instead, in the phrasing. A modulo should be used. Decision: The CR was agreed in principle. 25.322 CR 0307. CR	25.322	Rel-7	NEC
R2-071436 Use of DAR over CCCH R2-071437 Draft CR to 25.322 DAR over CCCH The document was presented by () from Samsung. Discussion: What does it give in addition to the Cell_FACH enhancement feature ? Some text (in the 25.331 CR) may lead to believe that this is optional for the UE. This will be included in the Rel-7, optional for the UE. Duplication avoidance is needed for MBMS, so this may somehow be linked with the MBMS feature. Duplication avoidance and re-ordering is optional for the CCCH. This will be clarified with a note. Decision: This will be included in the Rel-7, optional for the UE. The CR was agreed in principle. 25.322 CR 0308	LG Elec LG Elec	ronics Inc, ronics Inc.	Samsung , Samsung
R2-071438 Draft CR to 25.331 DAR over CCCH	LG Elec	ronics Inc,	Samsung

The document was presented by (...) from Samsung.

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Current minutes of the 57bis TSG-RAN WG2 meeting				
Discussion: No configurable parameters (no RRR CR). RLC CR only - configuration of parameter is UE optional. Decision: The document was noted. The CR was not agreed. No configurable parameters (no RRC CR).				
R2-071439 Control Information Transmission in RLC R2-071440 Draft CR to 25.322 on Control Information Transmission in RLC Document R2-071439 was presented by () from Samsung. Discussion:				LG Electronics Inc. LG Electronics Inc.
Decision: The document was noted. R2-071440 was noted as a consequence.				
R2-071476 Handling AMD PDU outside the reception window The document was presented by Sam Jiang from ASUSTeK. Discussion: Decision: The document was noted.	CR	25.322	Rel-7	ASUSTeK
R2-071478 Improvement of RLC reset procedure The document was presented by Sam Jiang from ASUSTeK. Discussion:	CR	25.322	Rel-7	ASUSTeK
Decision: The document was noted. Proposal 4 may be considered again.				
R2-071482 Clarification on Pending Activation Time of Integrity Protection during SRNS Relocation The document was presented by Sam Jiang from ASUSTeK. Discussion: This scenario should not happen today, see TS 33.102. Decision: The document was noted.	CR	25.331	Rel-7	ASUSTeK

15 Study Item on scope of future FDD HSPA Evolution

R2-071199	Enhanced SRNS relocation for the HSPA Evolution		QUALCOMM Europe	Mr. Francesco Grilli
R2-071434	Evolution	CR	QUALCOMM Europe	Mr. Francesco Grilli
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16 Release 5 & other Release 6 corrections

R2-071513	R2-071513 (R1-071249, to RAN2). Reply LS (to R2-070953) on High Bit Rate SRB					Icatel-Lucent
R2-07 1517	(R3-070499, to RANZ). LS on Clarification on two scenarios Enhanced Broa	idcast o	ver lur	R/	AN WG3 N	loloroia
I nose LSs w	ere postponed for the next meeting.					
R2-071132	Addition of RAB combinaison for SRB mapped on DL "HSDPA + DCH"	CR	25.993	Rel-7	Alcatel-Lucent	
	Addition of RAB combinaison for Voip 17.2kbps with Rohc and Rel-6 RLC					
R2-071133	Withdrawn before presentation (not available).	CR	25.993	Rel-7	Alcatel-Lucent	
R2-071168	Additional DCH RAB Combinations	CR	25.993	Rel-7	Siemens Networks	
R2-071169	HSPA RAB Combinations	CR	25.993	Rel-7	Siemens Networks	
	Multiplexing option selection in case of E DCH TRANSMISSION equal					
R2-071181	FALSE	CR	25.331	Rel-6	Infineon Technologies	Mr. Roland Gruber
R2-071423	MBMS UE linking for enhanced broadcast mode				NEC	Mr. David Lecompte
R2-071499	Correction of the IE 'MBMS service identity' included in the IE 'RAB info'	CR	25.331	Rel-6	Ericsson	Mr. Sven Ekemark

17 Other Rel-7 Work Items (CPC, MIMO, 16 QAM UL & 64 QAM DL)

R2-071178	Release-7 dependancies				Samsung, Ericsson, Motorola, Nokia	Mr. Gert-Jan van Lieshout
50.074040				Rel-		
R2-071219	Correction on introduction of 16QAM uplink	CR	25.331	/ Pol	Alcatel-Lucent	
R2-071220	Correction on 64QAM and MIMO UE capability in RRC	CR	25.331	7	Alcatel-Lucent	
	Correction to CPC UL DTX for addition of a new cell in the active			Rel-		
R2-071221	set.	CR	25.331	7	Alcatel-Lucent	
R2-071406	Considerations on Transport block tables in 64QAM				Nokia	Mr. Juho Pirskanen
				Rel-		
R2-071407	Clarification on assigning HARQ process IDs for MIMO	CR	25.331	7	ASUSTeK	
R2-071421	64QAM and MIMO lower categories				Nokia	Mr. Luis Barreto
						Mr. Etienne
R2-071473	CPC parameter ranges				Qualcomm Europe	Chaponnière
						Mr. Etienne
R2-071474	MIMO - DL 64QAM UE categories				Qualcomm Europe	Chaponnière
R2-071509 (R1-071238, to RAN2). LS on 64QAM HSDPA and HSDPA MIMO UE categories				RAN WG1	Qualcomm	
The LS R2-0	071509 was postponed for the next meeting.					

18 Other Rel-7 Study Items

No input.

Study item on 3G Home NodeB 19

R2-071502 3G Home NodeB Study Item Technical Report

Motorola

NTT DoCoMo, Orange, Telecom Italia, Vodafone Group,

R2-071529 Mobility and Access Control Requirements for LTE Home-eNodeB The document was presented by Dave Fox from Vodafone. Discussion: Interworking with GERAN is also meant to be supported. This is for LTE. Decision: This will go in one annex in the Stage 2. Refinements of the requirements will also be discusse d by email (Vodafone). In R2-071601.

20 TEI8

LSs:

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R2-071506 The LS was	(GP-070517, to RAN2). Reply LS (to S1-070300) on Registration in Densely populated area postponed for the next meeting.	TSG GERAN	Ericsson
R2-071521	(GP-070497, to RAN2. Reply LS (to S1-061408) on feasibility of GAN enhancements		TSG GERAN

Harald (...) (T-Mobile) presented this document. **Discussion:** An LS will be sent to GERAN from the RAN2 Kobe meeting (the answer is expected for the following week). Decision: This will be discussed under the form of points to be discussed with GERAN. This will be done in Kobe.

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Current minutes of the 57bis TSG-RAN WG2 meeting R2-071396 A way forward for registration in densely-populated area (RED)	NTT DoCoMo
21 Liaisons and outputs to other groups	
LTE:	
R2-071566 LS on security requirements on the eNode B The LS was approved.	RAN WG2
R2-071559 LS to GERAN/2 on neighbour cell list in LTE Dave. Revised in R2-071573:	Vodafone
R2-071573 LS to GERAN/2 on neighbour cell list in LTE The LS was approved.	Vodafone
R2-071567 LS to RAN1 on Time alignment principles for LTE (exect title tbd) The document was presented by Gert-jan van Lieshout from Samsung. Discussion: Is the drift measurement possible ? This is only a question onyhow. Decision: The content of the LS was approved. Number R2-071602 was allocated followin number on the top.	Samsung g the meeting, in order to update the source and correct the doc
R2-071572 LS to RAN1 on LS on CQI feedback The document was presented by Johan Johansson from Huawei. Discussion: Decision: The LS was approved in R2-071603 (to update the source).	Huawei
Non-LTE: R2-071569 LS to GERAN on questions on inter-system/modes handovers	Nokia
The ES was windrawn before presentation (not available).	

Current minutes of the 57bis TSG-RAN WG2 meeting R2-071571 LS to RAN3 on extension of RNC-Id The document was presented by Juho Pirskanen from Nokia. Discussion: Decision: The LS was approved as it was.	Nokia
R2-071584 LS to RAN1 on on CELL_PCH/URA_PCH operation in Enhanced CELL_FACH The document was presented by Nathan Tenny from Qualcomm. Discussion: Text will be rephrased to mention Paging Type 1 (in two places). Decision: The LS was revised in R2-071596, approved.	Qualcomm
R2-071589 LS to RAN1/RAN4 on cluster (re-)selection The document was presented by Patrick Fischer from LG Electronics. Discussion: First sentence needs to be clarified. TSG RAN needs to be copied. Decision: The content of the LS was approved in R2-071597, that was revised again in R2	LG Electronics -071605 in order to update the source. Approved.
R2-071593 Uplink VoIP Scheduling This document was presented by Jinsock Lee from NEC. Discussion: "Companies views expressed in RAN2". Decision: <i>Email agreement</i> . <u>See Point 6.</u>	NEC
22 Email agreement/approvals	
Subject	Rapporteur
Point 1: R2-071592 Email discussion on UE State during MBMS Reception	Vodafone Group

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Point 2: R2-071389 LTE System Analysis of Control Plane and User Plane Latency and Handover Interruption

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China Mobile, KPN,

Current minutes of the 57bis TSG-RAN WG2 meeting		
Times Rapporteur: Dave Fox, Vodafone	NTT DoCoMo, Orange, Sprint, T- Mobile, Telecom Italia, Vodafone	
The document was revised into:		
LTE System Analysis of Control Plane and User Plane Latency and Handover Interruption <u>R2-071607</u> Times This will be discussed again at RAN2-58 (see R2-071810 and R2-071811)	China Mobile, KPN, NTT DoCoMo, Orange, Sprint, T- Mobile, Telecom Italia, Vodafone	Formatted: Font: (Default) Times New Roman, 12 nt
Point 3: R2-071598 EUTRAN Stage 2 Update	Nokia	Formatted Table
The document was approved.		
Point 4: R2-071599 Email discussion on cell reselection parameters in LTE This will be discussed again at RAN2-58.	Ericsson	
Point 5: R2-071600 LTE System Information content & delivery This will be discussed again at RAN2-58.	Motorola	
Point 6: R2-071593 Uplink VolP Scheduling The LS was approved over the reflector in R2-071606.	NEC -	Formatted Table
Point 7: R2-071527 Definitions relating to SFN in E-MBMS This will be discussed again at RAN2-58.	Vodafone Group	
Point 8: R2-071601 Mobility and Access Control Requirements for LTE Home-eNodeB This will be discussed again at RAN2-58.	Vodafone Group	Formatted Table

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Point 9: R2-071593 LS on Uplink VolP Scheduling

23 Any other business

During the next meeting (RAN2-58), the LTE will start on the Monday. RAN2-58 will close at 16h00.

24 Closing of the meeting

The Chairman closed the meeting and thanked the delegates for their work.

Annex A: List of delegates (attendees)

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Annex B: List of documents

Doc. Name	Title	CR?			Source	Reserved by	Agenda Item
R2-071130	RAN2-57bis Agenda				WG Chairman		02: Approval of the agenda
R2-071131	Use of Integrity protection algorithm UIA/2: removal of a 'shall' in a note	CR	25.331	Rel-7	ETSI MCC		14: TEI7
R2-071132	Addition of RAB combinaison for SRB mapped on DL "HSDPA + DCH"	CR	25.993	Rel-7	Alcatel-Lucent		16: Release 5 and other Release 6 corrections
R2-071133	Addition of RAB combinaison for Voip 17.2kbps with Rohc and Rel-6 RLC	CR	25.993	Rel-7	Alcatel-Lucent		16: Release 5 and other Release 6 corrections
R2-071134	RRC Dedicated Message				Panasonic		05.10: LTE_ACTIVE mobility procedures
R2-071135	Concerns on the group scheduling				samsung		05.5: Scheduling (UL & DL contributions)
R2-071136	Byte alignment of L2 header				Nokia, Samsung, 1	Fexas Instruments Inc	05.14: Other LTE stage 2 subjects
R2-071137	PDCP/RLC/MAC header format				samsung		05.14: Other LTE stage 2 subjects
R2-071138	Variable Size RLC Sequence Number				samsung		05.14: Other LTE stage 2 subjects
R2-071139	Lite RLC vs. Normal RLC				samsung		05.14: Other LTE stage 2 subjects
R2-071140	L2 header optimization for HSPA+ Removing an incomplete optimization for RLC operations				samsung		08: Improved L2 support for high data rate
R2-071141	during HSDPA cell change				samsung		14: TEI7
R2-071142	System information content				Panasonic		05.3: System Information content & delive
R2-071143	Random Access Preamble signatures usage Measurement Functionality Split for Brodcast and				Panasonic		05.4: Random access procedure
R2-071144	Dedicated				Panasonic		05.10.1: Intra LTE
R2-071145	MCCH Transmission in LTE				Panasonic		05.12.2: Stage 2 inputs
R2-071146	Uplink feedback for eMBMS operations				Panasonic		05.12.2: Stage 2 inputs
R2-071147	UL HARQ Protocol Issues				Panasonic		05.14: Other LTE stage 2 subjects
R2-071148	RLC TM Mode for U-Plane				Panasonic		05.14: Other LTE stage 2 subjects
R2-071149	RLC PDU format for LTE				Panasonic		05.14: Other LTE stage 2 subjects
R2-071150	MAC PDU format for LTE Minutes of RAN2-57, 12-16 February 2007, Saint-Louis				Panasonic		05.14: Other LTE stage 2 subjects
R2-071151	USA				ETSI MCC	Mr. Jubo	03: Minutes of the previous meeting
R2-071152	Enhanced CELL_FACH state in FDD in 25.301	CR	25.301		Nokia	Pirskanen Mr. Juho	07: Enhanced Cell_FACH State in FDD
R2-071153	Enhanced CELL_FACH state in FDD in 25.302	CR	25.302		Nokia	Pirskanen	07: Enhanced Cell_FACH State in FDD
R2-071154	mobile TV mode swithing Delay optimization				HUAWEI		14: TEI7
R2-071155	Blacklist Maintenance				HUAWEI		05.3: System Information content & delive

R2	-071156	Neighbour cell reduction using LCV				HUAWEI		05.3: System Information content & delivery
R2	-071157	Admission Control at Target eNB				Nortel		05.10.1: Intra LTE
R2	-071158	MBMS Network Optimization				HUAWEI		05.12.2: Stage 2 inputs
R2	-071159	Hierarchical MCCH				Nortel		05.12.2: Stage 2 inputs
R2	-071160	Redirection scheme in LTE				HUAWEI		05.10.1: Intra LTE
R2	-071161	Discontinuous reception in CELL-FACH				HUAWEI		07: Enhanced Cell_FACH State in FDD
R2	-071162	Enhanced CELL_FACH in FDD in 25.304	CR	25.304		Nokia	Mr. Juho Pirskanen Mr. Juho	07: Enhanced Cell_FACH State in FDD
R2	-071163	Enhanced CELL_FACH in FDD 25.321	CR	25.321		Nokia	Pirskanen Mr. Juho	07: Enhanced Cell_FACH State in FDD
R2	-071164	Enhanced CELL_FACH in FDD 25.331	CR	25.331		Nokia	Pirskanen	07: Enhanced Cell_FACH State in FDD
R2	-071165	A New Measurement to Support UL Scheduler Operation				Mitsubishi Electric Corp.		05.5: Scheduling (UL & DL contributions)
R2	-071166	T305, CELL FACH & SRNC RELOCATION				HUAWEI		14: TEI7 16: Release 5 and other Release 6
R2	-071168	Additional DCH RAB Combinations	CR	25.993	Rel-7	Siemens Networks		corrections
R2	-071169	HSPA RAB Combinations	CR	25.993	Rel-7	Siemens Networks		corrections
R2	-071170	into 25.993				Siemens Networks		21: Liaison and output to other groups
R2	-071171	Pathloss & Size in RACH signature				Samsung, NTT DoCoMo	Mr. Gert-Jan van Lieshout	05.4: Random access procedure
R2	-071172	eNB security handling LTE_IDLE -> LTE_ACTIVE				Samsung	van Lieshout	05.14: Other LTE stage 2 subjects
R2	-071173	Idle mode paging				Samsung	van Lieshout	05.14: Other LTE stage 2 subjects
R2	-071174	Access Service Classes in LTE				Samsung	van Lieshout	05.4: Random access procedure
R2	-071175	UE Downlink reception capability				Samsung Samsung Ericsson	van Lieshout	05.8: UE capabilities
R2	-071176	Handling of AMBR				Nokia, NTT DoCoMo, Siemens Networks	Mr. Gert-Jan van Lieshout Mr. Gert-Jan	05.5: Scheduling (UL & DL contributions)
R2	-071177	CQI handling during DRX				Samsung	van Lieshout	update, DRx mechanism
-	074470	Deleses Ziden ender des				Samsung, Ericsson,	Mr. Gert-Jan	17: Other Rel-7 Work Items (CPC, MIMO, 16
RZ	-071178	Release-7 dependancies				Motorola, Nokia	Mr. Gert-Jan	05.2.3: Implicit versus explicit DRx value
R2	-071179	DRX handling				Samsung	van Lieshout Mr. Gert-Jan	update, DRx mechanism
R2	-071180	Downlink Hybrid ARQ Signaling Multiplexing option selection in case of				Samsung	van Lieshout Mr. Roland	05.5: Scheduling (UL & DL contributions)
R2	-071181	E_DCH_TRANSMISSION equal FALSE	CR	25.331	Rel-6	Infineon Technologies	Gruber	corrections
R2	-071182	Contention-based scheduling request in LTE_ACTIVE Contention-free Intra-LTE handover in synchronous				IPWireless		05.4: Random access procedure
R2	-071183	network				IPWireless		05.10.1: Intra LTE
R2	-071184	RACH procedure(s) in E-UTRAN				IPWireless	Mr. Stenhen	05.4: Random access procedure
R2	-071185	Reordering in Enhanced Cell FACH				InterDigital	Terry Mr. Stophon	07: Enhanced Cell_FACH State in FDD
R2	-071186	Mobility and Interworking Between R6 and R7				InterDigital	Terry	08: Improved L2 support for high data rates

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R2-071187	Byte Alignment for RLC and MAC Headers? Minimizing the RACH Procedure Requirement During				InterDigital	Terry Mr. Stephen	05.14: Other LTE stage 2 subjects
R2-071188	LTE Handover				InterDigital	Terry	05.10.1: Intra LTE 06: EDD Enhanced Uplink: inputs on the two
R2-071189	"Maximum_Serving_Grant" setting at TTI change	CR	25.321	Rel-6	Panasonic		open issues discussed in Saint Louis
R2-071190	Cell_FACH				Ericsson	Mr. Janne Peisa Mr. Janno	07: Enhanced Cell_FACH State in FDD
R2-071191	CELL_FACH				Ericsson	Peisa Mr. Janno	07: Enhanced Cell_FACH State in FDD
R2-071192	Open issues for Improved L2 support of high data rates				Ericsson	Peisa Mr. Janne	08: Improved L2 support for high data rates
R2-071193	Configuration of the Enhanced RLC protocol				Ericsson Ericsson, AsusTek,	Peisa	08: Improved L2 support for high data rates
R2-071194	Optimization to the baseline MAC-ehs header				Interdigital, Huawei, ZTE	Mr. Janne Peisa	08: Improved L2 support for high data rates
R2-071195	RI C ontimization for Improved L2				Ericsson, Nokia, Samsung	Mr. Janne Peisa	08: Improved I 2 support for high data rates
12 01 100					ounioung	Mr. Janne	
R2-071196	L2 enhancements: Baseline CR to MAC	CR	25.321	Rel-7	Ericsson	Peisa Mr. Janne	08: Improved L2 support for high data rates
R2-071197	L2 enhancements: Baseline CR to RLC	CR	25.321	Rel-7	Ericsson	Peisa Mr. Jappo	08: Improved L2 support for high data rates
R2-071198	L2 enhancements: Draft CR to RRC	CR	25.321	Rel-7	Ericsson	Peisa Mr. Francesco	08: Improved L2 support for high data rates
R2-071199	Enhanced SRNS relocation for the HSPA Evolution				QUALCOMM Europe	Grilli Mr. Francesco	Evolution
R2-071201	Text proposal on measurement gap scheduling				QUALCOMM Europe	Grilli Mr. Francesco	05.10.2: LTE to/from UTRAN
R2-071202	E-MBMS scheduling				QUALCOMM Europe	Grilli Mr. Francesco	05.12.2: Stage 2 inputs
R2-071203	Structure of BCH				QUALCOMM Europe	Grilli Mr. Francesco	05.3: System Information content & delivery
R2-071204	Scheduling of D-BCH				QUALCOMM Europe	Grilli	05.3: System Information content & delivery
R2-071205	Protocol termination for HO signalling				QUALCOMM Europe		05.10.1: Intra LTE
R2-071206	Considerations on RRC re-establishment				QUALCOMM Europe		05.10.1: Intra LTE
R2-071207	Camping load balancing in LTE				QUALCOMM Europe	Mr. Francesco	05.11: LTE_IDLE mobility procedures
R2-071208	Marooned UE in "Camped on any cell"				QUALCOMM Europe QUALCOMM Europe	Grilli Mr. Francesco	14: TEI7
R2-071209	Changeable Parameters in UE Capability				Nokia	Grilli Mr. Patrick	14: TEI7 05.2.3: Implicit versus explicit DRx value
R2-071210	DRX during continuous transmission				LG Electronics Inc.	Fischer	update, DRx mechanism
R2-071211	Framework for UE capability handling in LTE				QUALCOMM Europe	Mr. Stanislas	05.8: UE capabilities
R2-071212	PDCP variables handling at SRNS relocation	CR	25.323		Alcatel-Lucent	Bourdeaut Mr. Patrick	14: TEI7
R2-071213	Further details on LTE neighbouring list optimization				LG Electronics Inc.	Fischer	05.2.4: BCH for LTE
R2-071214	Optimization for Tracking Area Update signalling				QUALCOMM Europe	Mr. Patrick	05.11: LTE_IDLE mobility procedures
R2-071215	Allocation of a "short" C-RNTI in message 2				LG Electronics Inc.	Fischer	05.4: Random access procedure
R2-071216	Configuration of RACH measurements in HS-FACH	CR	25.308	Rel-7	Alcatel-Lucent	Mr. Stanislas	07: Enhanced Cell_FACH State in FDD
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R2-071217	CQI reporting for E-MBMS AMC				Alcatel-Lucent	Mr. Stanislas Bourdeaut	05.12.2: Stage 2 inputs
R2-071218	Cell identifier encoding alignment	CR	25.331	Rel-7	Alcatel-Lucent	Bourdeaut	14: TEI7
R2-071219	Correction on introduction of 16QAM uplink	CR	25.331	Rel-7	Alcatel-Lucent		17: Other Rel-7 Work Items (CPC, MIMO, 16 QAM UL & 64 QAM DL) 17: Other Rel 7 Work Items (CPC, MIMO, 16
R2-071220	Correction on 64QAM and MIMO UE capability in RRC Correction to CPC UL DTX for addition of a new cell in	CR	25.331	Rel-7	Alcatel-Lucent		QAM UL & 64 QAM DL) 17: Other Rel-7 Work Items (CPC, MIMO, 16
R2-071221	the active set.	CR	25.331	Rel-7	Alcatel-Lucent		QAM UL & 64 QAM DL) 06: FDD Enhanced Uplink: inputs on the two
R2-071222	Correction on E-TFC selection and Serving Grant	CR	25.321	Rel-6	Alcatel-Lucent	Mr. Benoist	open issues discussed in Saint Louis
R2-071225	Performance of Grouping				Nokia	Sébire	05.5: Scheduling (UL & DL contributions)
R2-071226	Uplink Feedback for E-MBMS				Motorola	Mr. Benoist	05.12.1: Requirem,ents/scenarios
R2-071227	Number of Control Symbols				Nokia	Sébire	05.5: Scheduling (UL & DL contributions)
R2-071228	Dedicated Random Access Signatures				Motorola	Mr. Demaint	05.4: Random access procedure
R2-071229	Radio Link Failure and Context Recovery Random Access Design and Procedure with Dedicated				Nokia	Sébire	05.10.1: Intra LTE
R2-071230	Signatures				Motorola	Mr. Densist	05.4: Random access procedure
R2-071231	Handover Failure Recovery				Nokia Nokia, Siemens	Sébire Mr. Benoist	05.10.1: Intra LTE
R2-071232	Relevant Information for HO				Networks	Sébire	05.10.1: Intra LTE
R2-071234 R2-071235	Cell Access Control Summary of email discussion on implicit vs. explicit DRX control				Motorola Email Rapporteur (NEC)		05.3: System Information content & delivery 05.2.3: Implicit versus explicit DRx value update, DRx mechanism
R2-071236	Handover Requirements				Nokia	Mr. Benoist Sébire	05.2.2: Data handling at relocation
R2-071237	RACH Resource Management				Motorola		05.4: Random access procedure
R2-071238	Data Forwarding at Handover				Nokia	Mr. Benoist Sébire	05.2.2: Data handling at relocation
R2-071239	Fast and Reliable Handover				Nokia	Sébire Mr. Benoist	05.10.1: Intra LTE
R2-071240	Forwarding Instant				Nokia	Sébire Mr. Benoist	05.10.1: Intra LTE
R2-071241	Ciphering for the User Plane Group Based Optimization for Signalling of Downlink				Nokia	Sébire	05.2.1: U-plane layer for ciphering
R2-071242	Scheduling				SHARP	Mr. Benoist	05.5: Scheduling (UL & DL contributions)
R2-071243	Sequence Number Handling at Handover				Nokia Nokia Samsung	Sébire Mr. Benoist	05.2.1: U-plane layer for ciphering
R2-071244	MBMS Agreements				Siemens Networks Nokia, Siemens	Sébire Mr. Benoist	05.12.2: Stage 2 inputs
R2-071245	MBMS Definitions				Networks Nokia, Siemens	Sébire Mr. Benoist	05.12.2: Stage 2 inputs
R2-071246	MCCH Control				Networks	Sébire	05.12.1: Requirem, ents/scenarios
R2-071247	Flexible DRX Control in LTE				SHARP		update, DRx mechanism

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		Nokia, Siemens	Mr. Benoist	
R2-071248	Header Compression in MBMS for E-UTRAN	Networks NEC, Nokia, Siemens	Sébire Mr. Benoist	05.12.1: Requirem,ents/scenarios
R2-071249	HARQ-ARQ Interactions	Networks	Sébire Mr. Benoist	05.14: Other LTE stage 2 subjects 05.14: Other LTE stage 2 subjects 05.5:
R2-071251	Synchronous adaptive HARQ for E-UTRAN UL	Nokia	Sébire Mr. Bonoist	Scheduling (UL & DL contributions)
R2-071252	On the need for forward HO	Nokia	Sébire Mr. Bonoist	05.10: LTE_ACTIVE mobility procedures
R2-071253	Non-Contention Based HO vs. RACH	Nokia	Sébire	05.10.1: Intra LTE
R2-071254	Requirements for redirection in E-UTRAN	Nokia, Telecom Italia	Sébire	to/from other RATs
R2-071255	High level mobility procedure in heterogeneous networks	Nokia	Sébire	05.11: LTE_IDLE mobility procedures
R2-071256	configuration and Optimization	Nokia	Sébire	05.14: Other LTE stage 2 subjects
R2-071257	An operator configurable procedure for reading the scheduling units	Nokia	Mr. Benoist Sébire	05.3: System Information content & delivery
R2-071258	Mobility uses cases based on the access pipe concept	Nokia	wr. Benoist Sébire	05.10: LTE_ACTIVE mobility procedures, 05.11: LTE_IDLE mobility procedures
R2-071259	System Information change indication	Nokia	Mr. Benoist Sébire	05.3: System Information content & delivery
R2-071260	Efficient CQI feedback	HUAWEI		05.7: MIMO support 05.2.3: Implicit versus explicit DRx value
R2-071261	Hybrid DRX Control	RIM		update, DRx mechanism
R2-071262	Robust MAC signalling	RIM		05.14: Other LTE stage 2 subjects
R2-071263	Recovery from DRX De-synchronization	RIM		05.14: Other LTE stage 2 subjects
R2-071264	Optimized provisioning of RACH in LTE	Texas Instruments Inc		05.4: Random access procedure
R2-071265	Content of Message1 and the RACH procedure in LTE Enabling DL reception of system and control information from Intra –frequency	Texas Instruments Inc		05.4: Random access procedure
R2-071266	neighbors without gaps in the serving cell	Texas Instruments Inc		05.3: System Information content & delivery
R2-071267	On Uplink Synchronization maintenance in LTE	Texas Instruments Inc		05.6: Time alignment principles
R2-071268	Enhanced MAC-hs header optimization Optimized HO method for reducing latencies in UI	HUAWEI		08: Improved L2 support for high data rates
R2-071269	synchronization and initial UL allocation in E-UTRA	Texas Instruments Inc		05.10.1: Intra LTE
R2-071270	On the issue of inter-RAT neighbouring info reduction	NEC		05.2.4: BCH for LTE
R2-071271	Connection Re-establishment	NEC		05.10.1: Intra LTE
R2-071272	synchronization	NEC		05.6: Time alignment principles
R2-071273	Downlink DRX and downlink HARQ interaction	NEC		update, DRx mechanism
R2-071275	RACH Resource Control	NEC		05.4: Random access procedure
R2-071276	HO measurements Email discussion summary on two open issues on EDCH serving carefundste	NEC Email rapporteur		05.10.1: Intra LTE 06: FDD Enhanced Uplink: inputs on the two open issues discussed in Saint Louis
R2-071278	PTP/PTM radio bearer switching in F-MBMS scenarios	FTRI		05 12 1: Requiremente/scenarios
R2-071279	Considerations on uplink feedback channel for E-MBMS	ETRI		05.12.1: Requirem,ents/scenarios
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R2-071281	message 2 issue in random access procedure	ZTE	Du	05.4: Random access procedure

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R2-071283	Combination of Schedule and frequency hopping				ZTE	Du Mr. Benoist	05.5: Scheduling (UL & DL contributions) 05.2.3: Implicit versus explicit DBx value
R2-071284	Evaluating DRX concepts for E-UTRAN				Nokia	Sébire Mr. Benoist	update, DRx mechanism 05.2.3: Implicit versus explicit DRx value
R2-071285	DRX parameters in E-UTRAN				Nokia	Sébire Mr. Benoist	update, DRx mechanism 05.2.3: Implicit versus explicit DRx value
R2-071286	On the need for flexible DRX Solution for sending NAS together with RRC connection				Nokia	Sébire Mr. Janne	update, DRx mechanism
R2-071287	request				Ericsson	Peisa	05.14: Other LTE stage 2 subjects
R2-071288	Feature Clean Up: Removal of DRAC leftover	CR	25.331		Siemens Networks		14: TEI7
R2-071289	DL User plane handling at mobility				Ericsson	Mr. Janne Peisa	05.2.2: Data handling at relocation
R2-071290	Intra-LTE handover optimization				Ericsson	Peisa	05.10.1: Intra LTE
R2-071291	On Intra-LTE Cell Reselection Methods				Ericsson	Peisa	restrictions
R2-071292	Scheduling optimizations - way forward				Ericsson	Peisa	05.5: Scheduling (UL & DL contributions)
R2-071293	Email discussion on U-plane ciphering location for LTE				NTT DoCoMo (email rap	porteur)	05.2.1: U-plane layer for ciphering
R2-071294	Email discussion on data handling at handover				NTT DoCoMo (email rap	porteur) Mr. Janne	05.2.2: Data handling at relocation
R2-071295	Termination of Security				Ericsson	Peisa	05.2.1: U-plane layer for ciphering
R2-071296	Consideration on one-to-all Qoffset				NTT DoCoMo	Ma laws	05.2.4: BCH for LTE
R2-071297	Clean up of Stage 2 FFS				Ericsson	Peisa	05.14: Other LTE stage 2 subjects
R2-071298	BCH transmission interval in LTE				NTT DoCoMo		05.3: System Information content & delivery
R2-071299	procedures in LTE				NTT DoCoMo		05.4: Random access procedure
R2-071300 R2-071301	Uplink synchronization Inter-frequency/RAT mobility control drivers and solutions				NTT DoCoMo NTT DoCoMo, Orange, Mobile, Vodafone	Telecom Italia, T-	05.6: Time alignment principles 05.10: LTE_ACTIVE mobility procedures, 05.11: LTE_IDLE mobility procedures
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R2-071302	Support for ROHC In SAE/LIE				Ericsson	Pelsa	05.14: Other LTE stage 2 subjects
R2-071303					ETRI		05.2.3: Implicit versus explicit DRx value
R2-071304	DRX management for LTE_ACTIVE				NTT DoCoMo, T-Mobile.	Orange, LG	update, DRx mechanism
R2-071305	Load balancing solutions for LTE				Electronics	Mr. Janne	05.11: LTE_IDLE mobility procedures
R2-071306	Configuration of PDCP in SAE/LTE				Ericsson	Peisa	05.14: Other LTE stage 2 subjects
R2-071307	Measurement gap control principles				NTT DoCoMo		05.10.2: LTE to/from UTRAN
R2-071308	RACH backoff control				Siemens Networks		05.4: Random access procedure
R2-071309	Paging procedure in LTE				NTT DoCoMo		05.14: Other LTE stage 2 subjects
R2-071311	Correction to signalling connection release at T314/315 expiry	CR	25.331	Rel-7	Motorola	Mr. Richard Burbidge Mr. Richard	14: TEI7
R2-071312	Cell Update Confirm with RLC re-establish indicator	CR	25.331	Rel-7	Motorola	Burbidge	14: TEI7
R2-071313	Paging procedure in LTE				NTT DoCoMo		05.14: Other LTE stage 2 subjects

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R2-071314	MAC PDU structure for LTE				NTT DoCoMo		05.14: Other LTE stage 2 subjects
R2-071315	RLC PDUs for LTE				NTT DoCoMo		05.14: Other LTE stage 2 subjects
R2-071316	RACH backoff control				Siemens Networks		05.4: Random access procedure
R2-071317	RLC PDUs for LTE				NTT DoCoMo		05.14: Other LTE stage 2 subjects
R2-071318	Gap control in E-UTRAN				Samsung		05.10.1: Intra LTE
R2-071319	Inter Layer Notification				Siemens Networks		05.12.2: Stage 2 inputs
R2-071320	Considerations on L1/L2 control signaling				ETRI		05.14: Other LTE stage 2 subjects
R2-071321	Correction of STTD Indicator for F-DPCH Tx Diversity	CR	25.331	Rel-7	Ericsson	Mr. Sven Ekemark Mr. Patrick	14: TEI7
R2-071322	Transport format and power headroom in preamble				LG Electronics Inc.	Fischer Mr. Sven	05.4: Random access procedure
R2-071323	Introduction of GAN PS handover	CR	25.306	Rel-7	Ericsson	Ekemark Mr. Sven	14: TEI7
R2-071324	Introduction of GAN PS handover	CR	25.331	Rel-7	Ericsson	Ekemark Mr. Patrick	14: TEI7
R2-071325	UE assisted tracking area update				LG Electronics Inc.	Fischer	05.11.1: Intra LTE
R2-071326	Layer 1 signalling based user detection for LTE MBMS LCR TDD physical layer enhancements text proposal for TP 26 005				IPWireless		05.12.2: Stage 2 inputs 11: MBMS LCR TDD Physical layer
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R2-071328	Handling of UE capability information in SAE/LTE				Ericsson T-Mobile, KPN, China Mobile, Orange, NTT	Peisa	05.8: UE capabilities
R2-071329	UE support for self-configuration and self-optimisation - Proposal for Stage2 (only RAN2 relevant part) LTE MBMS SFN: Super-frame Based Content				DoCoMo, Vodafone, Sprint, Telecom Italia	Mr. Axel Klatt	05.14: Other LTE stage 2 subjects
R2-071330	Synchronisation				IPWireless		05.12.2: Stage 2 inputs 09: MBMS FDD Physical layer
R2-071331	MBMS FDD and TDD Physical Layer Improvements				LG Electronics Inc., IP Wireless T-Mobile, NTT DoCoMo, Telecom Italia, Orange, ChinaMobile, Ericsson, Infineon Technologies.	Mr. Patrick Fischer	Enhancements, 10: MBMS TDD Physical layer Enhancements
R2-071332	Guidelines on the definition of LTE UE classes				Nokia	Mr. Axel Klatt Mr. Janne	05.8: UE capabilities
R2-071333	Byte alignment for user plane protocols in LTE				Ericsson	Peisa	05.14: Other LTE stage 2 subjects 09: MBMS FDD Physical layer
R2-071334	MBMS FDD and TDD Physical Layer Improvements	CR	25.331	Rel-7	LG Electronics Inc., IP Wireless	Mr. Patrick Fischer	Enhancements, 10: MBMS TDD Physical layer Enhancements 09: MBMS FDD Physical layer
R2-071335	MBMS FDD and TDD Physical Layer Improvements	CR	25.346	Rel-7	LG Electronics Inc., IP Wireless	Mr. Patrick Fischer	Enhancements, 10: MBMS TDD Physical layer Enhancements 09: MBMS FDD Physical layer
R2-071336	MBMS FDD and TDD Physical Layer Improvements	CR	25.306	Rel-7	LG Electronics Inc., IP Wireless	Mr. Patrick Fischer Mr. Himke van	Enhancements, 10: MBMS TDD Physical layer Enhancements
R2-071337	System information scheduling and change notification				Samsung LG Electronics Inc IP	der Velde Mr. Patrick	05.3: System Information content & delivery 09: MBMS FDD Physical layer
R2-071338	MBMS FDD and TDD Physical Layer Improvements	CR	25.304	Rel-7	Wireless	Fischer	Enhancements, 10: MBMS TDD Physical
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R2-071339	The life cycle of the cell from UE view				Panasonic		05.3: System Information content & delivery
R2-071340	Improved network load control for CELL/URA_PCH states				Nokia	Mr. Juho Pirskanen	07: Enhanced Cell_FACH State in FDD, 14: TEI7
R2-071341	Extension of RNC-ID				Nokia	Pirskanen Mr. Himko van	14: TEI7
R2-071342	Neighbouring cell information				Samsung	der Velde Mrs. Haivand	05.3: System Information content & delivery
R2-071343	Notification scheme of SI's Change				CATT	Quan Mr. Janne	05.3: System Information content & delivery
R2-071344	NDI-less HARQ operation				Ericsson	Peisa Mrs. Haivang	05.14: Other LTE stage 2 subjects
R2-071345	Enhancement to Buffer Status Reporting				CATT, RITT	Quan Mr. Janne	05.5: Scheduling (UL & DL contributions)
R2-071346	HARQ-ARQ Interactions for NACK to ACK error				Ericsson	Peisa Mrs. Haivang	05.14: Other LTE stage 2 subjects
R2-071347	Counting procedure for LTE MBMS Addition of signature sequence group information for the				CATT	Quan	05.12.2: Stage 2 inputs
R2-071348	E-HICH related to non-scheduled transmisson in 1.28Mcps TDD mode Use of tracking area- and cell identity for private	CR	25.331	Rel-7	CATT, TD-TECH, ZTE	Mrs. Haiyang Quan Mr. Himke yan	13: 1.28 Mcps TDD Enhanced Uplink
R2-071349	networks/home cells				Samsung	der Velde	05.9: E-UTRAN identities
R2-071350	Feature Clean Up: Removal of DRAC leftover	CR	25.331		Siemens Networks	Mr. Jonno	14: TEI7
R2-071351	Drivers for Inter-RAT Radio Resource Management S-CCPCH and PCH channel selection for Band IV or				Ericsson	Peisa	05.10.2: LTE to/from UTRAN
R2-071352	Band IX or Band X	CR	25.304		Siemens Networks		14: TEI7
R2-071353	Initialisation of CFN calculation for CELL_FACH	CR	25.331		Siemens Networks	Ma lana	14: TEI7
R2-071354	On Inter-RAT Cell Reselection Principles Radio Resource Management Aspects of Inter-RAT				Ericsson	Peisa Mr. Janne	05.11.2: LTE to/from other RATs
R2-071355	Handovers				Ericsson	Peisa Mr. Janne	05.10.2: LTE to/from UTRAN
R2-071356	Ciphering Location				Ericsson	Peisa Mr. Janno	05.2.1: U-plane layer for ciphering
R2-071357	Resource fragmentation in LTE uplink				DoCoMo, Inc Ericscon, Nokia	Peisa	05.14: Other LTE stage 2 subjects
R2-071358	Text Proposal for LTE QoS Terminology and Working Assumptions				Samsung, NTT DoCoMo, Inc	Mr. Janne Peisa Mr. Janne	05.14: Other LTE stage 2 subjects
R2-071359	Radio link failure				Ericsson	Peisa Mr. Oaman	05.10.1: Intra LTE
R2-071360	Reliability considerations for the Handover Command				Alcatel-Lucent	Aydin Mr. Osman	05.10.1: Intra LTE
R2-071361	RLC status reporting during handover				Alcatel-Lucent	Aydin Mr. Osman	05.10.1: Intra LTE
R2-071362	Radio Link Failure and RRC Context Recovery				Alcatel-Lucent	Aydin Mr. Janne	05.10.1: Intra LTE
R2-071363	UL user plane handling at mobility				Ericsson	Peisa Mr. Osman	05.2.2: Data handling at relocation
R2-071364	Relevant Information for Handover				Alcatel-Lucent	Aydin	05.10.1: Intra LTE
R2-071365	High Level Principles for DRX in LTE Active				Ericsson	Mr. Janne	05.2.3: Implicit versus explicit DRx value

			Peisa	update, DRx mechanism
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R2-071366	Further Requirements for the CQI Feedback	Alcatel-Lucent	Aydin Mr. Janne	05.14: Other LTE stage 2 subjects
R2-071367	RLC-MAC Header Formats	Ericsson	Peisa Mr. Ocmon	05.14: Other LTE stage 2 subjects
R2-071368	Persistent DL Scheduling and VoIP	Alcatel-Lucent	Aydin Mr. Janne	05.5: Scheduling (UL & DL contributions)
R2-071369	Multiplexing of MBMS services	Ericsson, Samsung	Peisa	05.12.2: Stage 2 inputs
R2-071370	RLC header format	Fujitsu		05.14: Other LTE stage 2 subjects
R2-071371	Mapping of MBMS logical channels to DL-SCH	Ericsson	Mr. Janne Peisa Mr. Janne	05.12.1: Requirem,ents/scenarios
R2-071372	E-UTRA Measurement Configuration and Control	Ericsson	Peisa Mr. Himko von	05.10: LTE_ACTIVE mobility procedures
R2-071373	Evaluation of backward handover schemes	Samsung	der Velde Mr. Himke van	05.10.1: Intra LTE
R2-071374	Radio connection establishment	Samsung	der Velde Mr. Himke van	05.14: Other LTE stage 2 subjects
R2-071375	RRC messages and procedures	Samsung	der Velde Mr. Himke van	05.14: Other LTE stage 2 subjects
R2-071376	RRC specification, way forward	Samsung	der Velde Mr. Himke van	05.14: Other LTE stage 2 subjects
R2-071377	Time critical system information	Samsung	der Velde	05.3: System Information content & deliver
R2-071378	The Urgency of HARQ-ARQ Interactions Early RACH Access with Reserved Signatures for inter-	ITRI		05.14: Other LTE stage 2 subjects
R2-071379	eNB Handover	ITRI		05.10.1: Intra LTE
R2-071380	Granularity Control on Buffer Reporting	ITRI		05.14: Other LTE stage 2 subjects
R2-071381	On setting the C-RNTI in RACH message two	Siemens Networks		05.4: Random access procedure
R2-071382	DRX handling in LTE Discussion on RAN implications of Equivalent Tracking	Panasonic		update, DRx mechanism
R2-071383	areas	Alcatel-Lucent		05.11.2: LTE to/from other RATs
R2-071384	Discussion on contents of message 3	Alcatel-Lucent, Samsun	g	05.4: Random access procedure
R2-071385	Discussion on Security mode control for LTE	Alcatel-Lucent		05.14: Other LTE stage 2 subjects
R2-071386	Contention resolution in aRACH	Samsung		05.4: Random access procedure
R2-071387	First quantification of UL control	Samsung		05.14: Other LTE stage 2 subjects
R2-071388	UL timing synchronized handover	Samsung China Mobile, KPN, NTT DoCoMo, Orange, Sprint, T-Mobile,	Mr. Deckerch	05.10.1: Intra LTE
R2-071389	LIE System Analysis of Control Plane and User Plane	relecom Italia, Vodafone	Mr. Prakash Bhat	05: LITRA/LITRAN Long Term Evolution
R2-071390	Discussion on Uplink Scheduling Request	TD Tech Ltd.	Silat	05.5: Scheduling (UL & DL contributions)
R2-071391	Feedback of Channel Quality	Philips	Mr. Paul Bucknell	07: Enhanced Cell_FACH State in FDD
R2-071392	MAC-ehs header structure	Philips	Mr. Paul Bucknell	- 08: Improved L2 support for high data rates
	A Semi-Autonomous DRX Control Scheme for		Mr. Janne	05.2.3: Implicit versus explicit DRx value



			Mr. Janne	05.2.3: Implicit versus explicit DRx value
R2-071394	CQI Reporting with regards to DRX operation	Ericsson	Peisa Mr. Janne	update, DRx mechanism
R2-071395	LTE MBMS functionality A way forward for registration in densely-populated area	Ericsson	Peisa	05.12.2: Stage 2 inputs
R2-071396	(RED)	NTT DoCoMo		20: TEI8
R2-071397	L2 MBMS content synchronization	Ericsson	Mr. Janne Peisa Mr. Janne	05.12.2: Stage 2 inputs
R2-071398	Idle Gaps for Handover Measurements in E-UTRAN	Ericsson	Peisa Mr. Janne	05.10: LTE_ACTIVE mobility procedures
R2-071399	HARQ Configuration for LTE	Ericsson	Peisa Mr. Janne	05.14: Other LTE stage 2 subjects
R2-071400	DL-SCH supporting single cell PTM with HARQ/CQI	Ericsson	Peisa Mr. Janne	05.12.1: Requirem, ents/scenarios
R2-071401	Summary of BCH for LTE email discussion	Ericsson	Peisa Mr. Janne	05.2.4: BCH for LTE
R2-071402	Mobility during attach	Ericsson	Peisa Mr. Juho	05.10.1: Intra LTE
R2-071403	Discontinous reception in CELL_FACH	Nokia	Pirskanen Mr. Juho	07: Enhanced Cell_FACH State in FDD
R2-071404	CELL_FACH	Nokia	Pirskanen Mr. Juho	07: Enhanced Cell_FACH State in FDD
R2-071405	On MAC-ehs header structures	Nokia	Pirskanen Mr. Juho	08: Improved L2 support for high data rates 17: Other Rel-7 Work Items (CPC, MIMO, 16
R2-071406	Considerations on Transport block tables in 64QAM	Nokia	Pirskanen	QAM UL & 64 QAM DL) 17: Other Rel-7 Work Items (CPC, MIMO, 16
R2-071407	Clarification on assigning HARQ process IDs for MIMO CR 25.331 Rel-7	ASUSTeK		QAM UL & 64 QAM DL)
R2-071408	Voice support in E-UTRAN	Orange		05.14: Other LTE stage 2 subjects 09: MBMS FDD Physical layer
R2-071409	UE capabilities for MBSFN	Nokia Nokia, 3. Ericsson.	Mr. Luis Barreto	Enhancements
R2-071410	Ping-pong control MBMS multi cell SFN transmission over areas of varying	Motorola	Mr. Luis Barreto Mr. Janne	14: TEI7
R2-071411	inter site distance	Ericsson	Peisa	05.12.2: Stage 2 inputs
R2-071412	On User Plane handling during inter-eNB HO	NEC		05.2.2: Data handling at relocation
R2-071413	Discussion of eMBMS Uplink Feedback Schemes	NEC		05.12: LTE MBMS
R2-071414	Simultaneous Tx/Rx (Duplex) Capabilities of LTE	IPWireless		05.8: UE capabilities
R2-071415	Clarification on use of Prioritized Bit Rate (PBR)	NEC		05.12.2: Stage 2 inputs
R2-071416	Resource allocations in target cell after Handover	NEC		05.10.1: Intra LTE
R2-071417	Text Proposal for Intra-LTE Handover	NEC		05.10.1: Intra LTE
R2-071418	User plane handling in case of IRAT mobility	NEC		05.10.2: LTE to/from UTRAN
R2-071419	Delivery of TA in LTE_ACTIVE	IPWireless		05.6: Time alignment principles
R2-071420	MBMS SFN Operation Principles	Nokia	Mr. Luis Barreto	Enhancements
R2-071421	64QAM and MIMO lower categories	Nokia	Mr. Luis Barreto Mr. Janne	QAM UL & 64 QAM DL)
R2-071422	Random access with dedicated preambles at handover	Ericsson	Peisa Mr. David	05.4: Random access procedure 16: Release 5 and other Release 6
R2-071423	MBMS UE linking for enhanced broadcast mode	NEC	Lecompte	corrections

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D0.074404	Optimization of switching between MBMS broadcast TV channels transmitted on ptp bearers (MBMS for Mobile	0.0	05 004	D-17		Mr. David	44.7517
R2-071424	Alignment of tabular to ASN.1 for SIB11/SIB12 and event	CR	25.331	Rel-7	NEC, Ericsson	Lecompte Mr. David	14: TEI/
R2-071425	1J	CR	25.331	Rel-7	NEC	Lecompte Mr. Dovid	14: TEI7
R2-071426	Correction of Out of Sequence Reception function	CR	25.331	Rel-7	NEC	Lecompte	14: TEI7
R2-071427	Enhanced CELL_FACH and power saving				NEC	Lecompte	07: Enhanced Cell_FACH State in FDD
R2-071428	Use of home/ private cells				Samsung	der Velde	05.14: Other LTE stage 2 subjects
R2-071429	E-MBMS architecture				Samsung	der Velde	05.12.2: Stage 2 inputs
R2-071430	LTE MBMS User detection Scheme				Semiconductor Inc	Mr. Natarajan Ekambaram Mr. David	05.12.2: Stage 2 inputs
R2-071431	Support of ROHC and context relocation				NEC	Lecompte	05.10.1: Intra LTE
R2-071432	Considerations on MBMS Resource Allocation				Motorola		05.12.2: Stage 2 inputs
R2-071433	Multicell EMBMS CQI Feedback				Motorola		05.12.2: Stage 2 inputs
R2-071434	Analysis on Uu interface aspect for Enhanced SRNS relocation for the HSPA Evolution	CR			QUALCOMM Europe	Mr. Francesco Grilli	15: Study Item on scope of future FDD HSF Evolution
R2-071435	SFN areas				Motorola		05.12.1: Requirem,ents/scenarios
R2-071436	Use of DAR over CCCH				LG Electronics Inc., Sar	nsung	14: TEI7
R2-071437	Draft CR to 25.322 DAR over CCCH				LG Electronics Inc., Sar	nsung	14: TEI7
R2-071438	Draft CR to 25.331 DAR over CCCH				LG Electronics Inc., Sar	nsung	14: TEI7
R2-071439	Control Information Transmission in RLC Draft CR to 25.322 on Control Information Transmission				LG Electronics Inc.		14: TEI7
R2-071440	in RLC				LG Electronics Inc.		14: TEI7
R2-071441	Discussion on MAC PDU structure				LG Electronics Inc.		05.14: Other LTE stage 2 subjects
R2-071442	Discussion on Uplink Traffic Shaping				LG Electronics Inc.		05.14: Other LTE stage 2 subjects
R2-071443	On the issue of HARQ/ARQ interaction				LG Electronics Inc.		05.14: Other LTE stage 2 subjects 05.2.3: Implicit versus explicit DRx value
R2-071444	Discussion on Behaviour in DRX				LG Electronics Inc.		update, DRx mechanism 05.2.3: Implicit versus explicit DRx value
R2-071445	DRX mechanism in LTE_ACTIVE UE				LG Electronics Inc.		update, DRx mechanism
R2-071446	Clarification and optimization of message 2				LG Electronics Inc.		05.4: Random access procedure
R2-071447	How to transmit TA information				LG Electronics Inc.		05.6: Time alignment principles
R2-071448	Issue on periodic measurement reporting				LG Electronics Inc.		05.10.1: Intra LTE
R2-071449	Transition indicator for VoIP in UL				LG Electronics Inc.		05.14: Other LTE stage 2 subjects
R2-071450	ACK to NACK error detecting mechanism				LG Electronics Inc.		05.14: Other LTE stage 2 subjects
R2-071451	LTE MBMS Transmission				LG Electronics Inc.		05.12.2: Stage 2 inputs
R2-071452	LTE MBMS Notifications				LG Electronics Inc.		05.12.2: Stage 2 inputs
R2-071453	Channel Quality Reporting on RACH				LG Electronics Inc.		07: Enhanced Cell_FACH State in FDD
R2-071454	Triggering of CQ Reporting on RACH				LG Electronics Inc.		07: Enhanced Cell_FACH State in FDD
R2-071455	Use of dedicated RACH signatures				LG Electronics Inc.		05.4: Random access procedure
R2-071456	Discussion on Message 4 in Random Access				LG Electronics Inc.		05.4: Random access procedure

R2-071457	Transmission of LTE Paging				LG Electronics Inc.		05.14: Other LTE stage 2 subjects
R2-071459	LTE				QUALCOMM Europe		05.10.1: Intra LTE
R2-071460	Uplink Scheduling for VoIP				Nokia	Mr. Benoist Sébire	05.5: Scheduling (UL & DL contributions)
R2-071461	RACH signature content				QUALCOMM Europe		05.4: Random access procedure
R2-071462	Comparison of persistent and group scheduling				QUALCOMM Europe		05.5: Scheduling (UL & DL contributions)
D2 071462	LTE Intra/Inter-RAT handover algorithms for					Mr. Francesco	05 10.1 TE ACTIVE mobility presedures
R2-071463	DRX principles					Gilli	05.10. ETE_ACTIVE mobility procedures 05.2.3: Implicit versus explicit DRx value update. DRx mechanism
R2-071465	Support of scalable codec for E-MBMS				Alcatel-Lucent		05.12.2: Stage 2 inputs
R2-071466	Transmission of E-MBMS control information				Alcatel-Lucent		05.12.2: Stage 2 inputs
R2-071467	Discussion on E-MBMS deployment scenarios				Alcatel-Lucent		05.12.1: Requirem,ents/scenarios
R2-071468	Audience measurement for MBMS in LTE				Alcatel-Lucent		05.12.2: Stage 2 inputs
						Mr. Etienne	
R2-071469	Data forwarding of IP packets				Qualcomm Europe	Chaponnière Mr. Etienne	05.2.2: Data handling at relocation
R2-071470	L2 Improvements and polling				Qualcomm Europe	Chaponnière Mr. Etienne	08: Improved L2 support for high data rates
R2-071471	L2 improvements and UE processing				Qualcomm Europe	Chaponnière Mr. Etienne	08: Improved L2 support for high data rates
R2-071472	L2 improvements - configuration				Qualcomm Europe	Chaponnière Mr. Etienne	08: Improved L2 support for high data rates 17: Other ReI-7 Work Items (CPC, MIMO, 16
R2-071473	CPC parameter ranges				Qualcomm Europe	Chaponnière	QAM UL & 64 QAM DL)
R2-071474	MIMO - DL 64QAM UE categories				Qualcomm Europe	Chaponnière Mr. Etienne	QAM UL & 64 QAM DL)
R2-071475	Ciphering in RLC				Qualcomm Europe	Chaponnière	05.2.1: U-plane layer for ciphering
R2-071476	Handling AMD PDU outside the reception window	CR	25.322	Rel-7	ASUSTeK	Mr. Sam Jiang	14: TEI7
R2-071477	LTE MBMS Rate Control				TD Tech		05.12.2: Stage 2 inputs
R2-071478	Improvement of RLC reset procedure	CR	25.322	Rel-7	ASUSTeK	Mr. Sam Jiang Mr. Etienne	14: TEI7
R2-071479	RLC local gap detection				Qualcomm Europe	Chaponnière Mr. Etienne	05.14: Other LTE stage 2 subjects
R2-071480	HARQ-ARQ interaction at the receiver				Qualcomm Europe	Chaponnière	05.14: Other LTE stage 2 subjects
R2-071481	System Information Scheduling Clarification on Pending Activation Time of Integrity				Motorola		05.3: System Information content & delivery
R2-071482	Protection during SRNS Relocation	CR	25.331	Rel-7	ASUSTeK		14: TEI7
R2-071483	VoIP Performance				Motorola		05.5: Scheduling (UL & DL contributions)
R2-071484	Text proposal for DL scheduling				Motorola,		05.5: Scheduling (UL & DL contributions)
R2-071485	Text proposal for UL scheduling				Motorola,		05.5: Scheduling (UL & DL contributions)
R2-071486	Discussion on scheduling				Motorola,		05.5: Scheduling (UL & DL contributions)
R2-071487	RLC header optimization with flexible PDU size				ASUSTeK	Mr. Sam Jiang	08: Improved L2 support for high data rates
R2-071488	MAC header for control message in LTE				ASUSTeK		05.14: Other LTE stage 2 subjects
R2-071489	RLC header design				Motorola		05.14: Other LTE stage 2 subjects
R2-071490	Enhanced MAC-hs header optimization				ASUSTeK		08: Improved L2 support for high data rates

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	R2-071491	12 architecture for LTE				I G Electronics Inc		05.2.1: U-plane layer for ciphering, 05.2.2:
	R2-071492	Contention Resolution and Initial Random Access				TD Tech		05.4: Random access procedure
	R2-071493	Multiple tracking areas concept and influence on paging load				NEC		05.11.1: Intra I TE
	R2-071494	Intra-LTE and inter-RAT cell reselection				NEC		05.11.1: Intra LTE
	R2-071495	Introduction of Enhanced CELL_FACH state: Direct data transmission to the UE in CELL_PCH state Introduction of Enhanced CELL_FACH state: manning of	CR	25.331		Nokia, Siemens Networks Nokia, Siemens	Mr. Juho Pirskanen Mr. Juho	07: Enhanced Cell_FACH State in FDD
	R2-071496	the PCCH to HS-DSCH	CR	25.331		Networks	Pirskanen Mrs. Haivang	07: Enhanced Cell_FACH State in FDD
	R2-071497	Some Small Editorial Corrections to TS 25.321	CR	25.321	Rel-7	CATT	Quan	13: 1.28 Mcps TDD Enhanced Uplink
	R2-071498	Proposed work plan for LTE performance verification				Rapporteur	Mr. Sven	05: UTRA/UTRAN Long Term Evolution
	R2-071499	the IE 'RAB info'	CR	25.331	Rel-6	Ericsson	Ekemark	corrections
	R2-071500	UE Capabilities for TDD MBSFN Additional Results on EMBMS Transmission				IPWireless		Enhancements
	R2-071501	Configurations				Motorola		05.12.1: Requirem, ents/scenarios
	R2-071502	3G Home NodeB Study Item Technical Report				Motorola		19: Study Item on 3G Home NodeB
	R2-071503	DRX control in LTE_Active		Update of 071200. T change is Source fiel	R2- he only n the d	IPWireless		update, DRx mechanism
	R2-071504	Principles for the new CELL_PCH/URA_PCH operation		(Vodafone added)	has been	QUALCOMM Europe, Vodafone	Mr. Francesco Grilli	07: Enhanced Cell_FACH State in FDD
	R2-071505	GERAN – LTE intervorking				TSG CT	Motorola	05.1: Incoming LSs on LTE
	R2-071506	(GP-070517, to RAN2). Reply LS (to S1-070300) on Registration in Densely populated area (GP-070549, to RAN2) LS on GERAN – LTE				TSG GERAN	Ericsson	20: TEI8
	R2-071507	interworking (P1 071212 to PAN2) Party I S (to P2 062557) on Partie	officion	ou for		TSG GERAN	Motorola	05.1: Incoming LSs on LTE
	R2-071508	delivery of Broadcast/Multicast Services (R1-071238, to RAN2). LS on 64QAM HSDPA and	enicien	CY IOI		RAN WG1	Samsung	05.1: Incoming LSs on LTE 17: Other Rel-7 Work Items (CPC, MIMO, 16
	R2-071509	HSDPA MIMO UE categories (R1-071239 to RAN2) Reply LS (to R2-070411) on				RAN WG1	Qualcomm	QAM UL & 64 QAM DL)
	R2-071510	DRX interval and CQI reporting cycle in LTE (R10.71241 to R4N2) Reply LS (to R2.070421) on				RAN WG1	Nokia	05.1: Incoming LSs on LTE
	R2-071511	Intra-frequency vs. Inter-frequency (P1.071248, to PAN2) Poply LS (to P2.070418) on pop				RAN WG1	Qualcomm	05.1: Incoming LSs on LTE
	R2-071512	initial cell search				RAN WG1	Ericsson	05.1: Incoming LSs on LTE
	R2-071513	(R1-071249, to RAN2). Reply LS (to R2-070953) on High Bit Rate SRB (R1-071250, Cc RAN2). LS on LTE measurement				RAN WG1	Alcatel-Lucent	corrections
	R2-071514	supporting Mobility (R1.0.71254 to RAN2) Reply LS (to R2-070419) on HS-				RAN WG1	Samsung	05.1: Incoming LSs on LTE
	R2-071515	SCCH enhancements in CELL_FACH (R3-070479, to RAN2), Reply LS (to C1-070401, R2-06368	(3) on R	adio		RAN WG1	Nokia	07: Enhanced Cell_FACH State in FDD
	R2-071516	Access Network Sharing in SAE/LTE	.,			RAN WG3	Ericsson	05.1: Incoming LSs on LTE
	D0.074547	(P2.070400 to PAN2) I S on Clarification on two				DANUMOO	Materala	40. Delever E and athen Delever 0
	R2-071517	(13=070499, to 10402). ES on clainication on two				RAN WG3	wotoroia	16: Release 5 and other Release 6

	scenarios "Enhanced Broadcast over Iur"
R2-071518	(R4-070317, to RAN2). Reply LS (to R2-070421) on Intra-frequency vs. Inter-frequency
R2-071519	(R4-070320, to RAN2). Reply LS (to R2-070418) on Initial search
R2-071520	(S3-070162, to RAN2). Reply LS (to R2-070420) on SIM and USIM usage in LTE/SAE
R2-071521	(GP-070497, to RAN2. Reply LS (to S1-061408) on feasibility of GAN enhancements
R2-071522	(R3-070484, to RAN2). LS on MBMS Session Update of the MBMS Service Area
R2-071523	(S2-071056, to RAN2). LS on MME separation Option B from SAE Gateway
R2-071524	SRNC identity (22-071046, Cc RAN2), LS on Location of PDCP in
R2-071525	eNode B (ETE RoHC WG Chair) Reply I S (to R2-070434) on
R2-071526	Questions regarding the ROHC Protocol
R2-071527	Definitions relating to SFN in E-MBMS
R2-071528	MCCH Optimisation for MBMS Enhanced Broadcast Mobility and Access Control Requirements for LTE
R2-071529	Home-eNodeB
R2-071530	Scheduling of the MCCH
R2-071531	UE State during MBMS Reception Initial Standardisation Requirements from Self-
R2-071532	Organizing Networks
R2-071533	Response to R2-071225
R2-071534	Response to R2-071292
R2-071535	Way Forward for DL Scheduling
R2-071536	Way Forward for UL Scheduling
R2-071537	Issues on Random Access Procedure
R2-071538	Optimization of RACH model
R2-071539	Scheduling of System Information
R2-071540	Synchronous adaptive HARQ for E-UTRAN UL
R2-071541	Standardised eNB measurements

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Qualcomm

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SA WG3	Ericsson	05.1: Incoming LSs on LTE
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RAN WG3	Nokia	14: TEI7
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SA WG2	Ericsson	05.1: Incoming LSs on LTE
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Vodafone Group Vodafone Group	elecom italia,	05.12.1: Requirem,ents/scenarios 05.12: LTE MBMS 05.12: LTE MBMS
Vodafone Group Motorola Alcatel-Lucent, CATT, Elektrobit, ETRI, Fujltsu, ITRI, Mitsubishi, NEC, Nokia, NTT DoCoMo, Panasonic, Qualcomm, Samsung, Siemens		05.14: Other LTE stage 2 subjects 05.5: Scheduling (UL & DL contributions) 05.5: Scheduling (UL & DL contributions)
Networks, Texas Instruments CATT, Elektrobit, ETRI, Fujitsu, ITRI, LGE, Mitsubishi, NEC, Nokia, NTT DoCoMo, Qualcomm, Samsung,	Mr. Benoist Sébire Mr. Benoist	05.5: Scheduling (UL & DL contributions)
Siemens Networks	Sebire Mr. Som liona	05.5: Scheduling (UL & DL contributions)
ASUSTER	Mr. Sam Jiang	05.4. Random access procedure
Ericsson Nokia NTT DoCoMo, KPN, Orange, Telecom	Mr. Benoist Sébire Mikio Iwamura	05.3: System Information content & delivery 05.14: Other LTE stage 2 subjects, 05.5: Scheduling (UL & DL contributions) 05.14: Other LTE stage 2 subjects, 05.5: Scheduling (UL & DL contributions)

				Mobile, Vodafone		
R2-071542	Flexible MAC-hs Format			LG Electronics Inc.	SungDuck	08: Improved L2 support for high data rates
R2-071543	Discussion on RLC Length Indicator			LG Electronics Inc.	SungDuck	08: Improved L2 support for high data rates
R2-071544	RAN Chairman report of RAN-35 to SA-35 (SP-070223) (R3-070509, Cc RAN2). LS on EPC update at inter			TSG RAN Chairman		04: Reports from other groups
R2-071545	eNodeB mobility (R3-070517, Cc RAN2), Reply LS on MME / UPE Pool			RAN WG3	Alcatel-Lucent	05.1: Incoming LSs on LTE
R2-071546	Areas and triggers for relocation Updated Minutes of RAN2-57, 12-16 February 2007			RAN WG3	Ericsson	05.1: Incoming LSs on LTE
R2-071547	Saint-Louis, USA (Draft2) Minutes of TSG RAN-35 meeting. Cvprus, 06-09			ETSI MCC		03: Minutes of the previous meeting
R2-071548	March 2007 (R3-070478, Cc RAN2), Reply LS (to C1-070562) on			ETSI MCC		04: Reports from other groups
R2-071549	Usage of Tracking Areas (TA) in LTE/SAE			RAN WG3		05.1: Incoming LSs on LTE
R2-071551	Way Forward for DL Scheduling			Alcatel-Lucent, CATT, Elektrobi, ETRI, Fujitsu, ITRI, Mitsubish, NEC, Nokia, NTT DoCoMo, Panasonic, Qualcomm Samsung, Siemens Networks, Texas Instruments, Ericsson CATT, Elektrobit, ETRI, Fujitsu, ITRI, LGE, Mitsubishi, NEC, Nokia, NTT DoCOMo, Qualcomm, Samsung, Siemens Networks	Mr. Benoist Sébire Mr. Benoist	05.5: Scheduling (UL & DL contributions)
R2-071552	Summary of email discussion on implicit vs. explicit DRX control			Ericson Email Rapporteur (NEC)	Sebire	05.2.3: Implicit versus explicit DRx value update, DRx mechanism
R2-071554	Comparison of persistent and group scheduling			QUALCOMM Europe		05.5: Scheduling (UL & DL contributions)
R2-071555	Enhanced CELL_FACH in FDD 25.321	CR	25.321	Nokia	Mr. Juho Pirskanen Mr. Juho	07: Enhanced Cell_FACH State in FDD
R2-071556	Enhanced CELL_FACH in FDD 25.331	CR	25.331	Nokia	Pirskanen	07: Enhanced Cell_FACH State in FDD
R2-071557	DRx Schemes comparison Neighbor cell specific parameters currently specified for			Nokia		07: Enhanced Cell_FACH State in FDD
R2-071558	UMŤS			Ericsson		05.2.4: BCH for LTE
R2-071559	LS on neighbour cell list in LTE Inter-frequency/RAT mobility control drivers (text			Vodafone		21: Liaisons and outputs to other groups
R2-071560	proposal)			NTT DoCoMo		05.10: LTE_ACTIVE mobility procedures
R2-071561	Draft TP on use of NCL for idle mode mobility			Samsung		05.3: System Information content & delivery
R2-071562	Text proposal on random access procedures			NTT DoCoMo		05.4: Random access procedure
R2-071563	Group Management			Motorola		05.5: Scheduling (UL & DL contributions)
R2-071564	Discussion on Uplink Scheduling Request			TD-Tech, Siemens Net	work	05.5: Scheduling (UL & DL contributions)
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approved LS	R2-071566	LS on security requirements on the eNode B				RAN WG2		05.2.1: U-plane layer for ciphering
	R2-071567	title tbd)				Samsung	Mr. Stephen	21: Liaisons and outputs to other groups
	R2-071568	Mobility and Interworking Between R6 and R7 LS to GERAN on guestions on inter-system/modes				InterDigital	Terry	08: Improved L2 support for high data rates
	R2-071569	handovers				Nokia		21: Liaisons and outputs to other groups
	R2-071570	Scheduling of System Information				Ericsson		05.3: System Information content & delivery
	R2-071571	LS to RAN3 on extension of RNC-Id				Nokia		21: Liaisons and outputs to other groups
	R2-071572	LS to RAN1 on MIMO support for LTE (exact title tbd)				Huawei		21: Liaisons and outputs to other groups
	R2-071573	LS on neighbour cell list in LTE				Vodafone		21: Liaisons and outputs to other groups
	R2-071574	Draft TP on use of NCL for idle mode mobility				Samsung		05.3: System Information content & delivery
	R2-071575	Void						
	R2-071576	Void						
	R2-071577	Void						
	R2-071578	Void						
	R2-071579	Void						
	R2-071580	Void						
	R2-071581	LCR TDD physical layer enhancements text proposal for TR 25.905 (R1.071779 to RAN2) Reply I S (to R2.070409) on HS-				TD-Tech		11: MBMS LCR TDD Physical layer Enhancements
	R2-071582	DSCH usage in CELL_FACH (R3-070700, Cc RAN2). LS on NAS Handling during				RAN WG1		07: Enhanced Cell_FACH State in FDD
	R2-071583	intra-LTE handover				RAN WG3		05.1: Incoming LSs on LTE
	R2-071584	LS to RAN1 on new CELL_PCH/URA_PCH operation				Qualcomm		21: Liaisons and outputs to other groups
	R2-071585	RLC header optimization with flexible PDU size				ASUSTeK	Mr. Sam Jiang Mr. Janne	08: Improved L2 support for high data rates
	R2-071586	L2 enhancements: Baseline CR to MAC	CR	25.321	Rel-7	Ericsson	Peisa	08: Improved L2 support for high data rates
	R2-071587	MAC-ehs header: summary and open issues				Ericsson		08: Improved L2 support for high data rates
	R2-071588	(S3-070283, to RAN2). LS on eNodeB Security				SA WG3		05.1: Incoming LSs on LTE
	R2-071589	LS to RAN1/RAN4 on cluster (re-)selection Way forward for ciphering location and user plane data				LG Electronics		21: Liaisons and outputs to other groups
	R2-071590	handling				Nokia		05.2.1: U-plane layer for ciphering
omail	R2-071591	UE State during MBMS Reception				Vodafone Group		05.12: LTE MBMS
discussion								
point 1	R2-071592	Email discussion on UE State during MBMS Reception				Vodafone Group		05.12: LTE MBMS
agreement	R2-071593	LS on Uplink VoIP Scheduling				NEC		05.5: Scheduling (UL & DL contributions) 05.2.3: Implicit versus explicit DRx value
	R2-071594	DRx and CQI reporting				NEC		update, DRx mechanism
	R2-071595	Text proposal				LG		
	R2-071596	LS to RAN1 on new CELL_PCH/URA_PCH operation				Qualcomm		
	R2-071597	LS to RAN1/RAN4 on cluster (re-)selection				LG Electronics		21: Liaisons and outputs to other groups
email	R2-071598	Email: EUTRAN Stage 2 Update				Nokia		
	R2-071599	Email discussion on cell reselection parameters in LTE				Ericsson		05.2.4: BCH for LTE

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TSG-RAN WG2 meeting Email discussions: LTE System Information content & delivery Email discussions: Mobility and Access Control Requirements for LTE Home-NodeB LS to RAN1 on Time alignment principles for LTE (exect title tbd) LS to RAN1 on MIMO support for LTE (exact title tbd) Void

LS to RAN1/RAN4 on cluster (re-)selection

Motorola

Vodafone Group Samsung Huawei

LG Electronics

05.3: System Information content & delivery

05.12.1: Requirem,ents/scenarios 21: Liaisons and outputs to other groups 21: Liaisons and outputs to other groups

21: Liaisons and outputs to other groups

Annex C: Table of Outgoing LSs to 3GPP groups

NUMBER	TITLE	RAN	R1	R3	R4	R5	SA	S1	S2	S3	S 4	S5	СТ	CT1	СТ3	CT4	GERAN	GERAN1	GERAN2
R2-071566	LS on security requirements on the eNode B			сс						to									
R2-071573	LS on neighbour cell list in LTE																to		to
R2-071602	LS on maintenance of UL Synchronisation		to		to														
R2-071603	LS to RAN1 on LS on CQI feedback		to																
R2-071571	Reply LS on Removal of limitation of SRNC identity	to		сс			сс		сс							сс	сс		сс
R2-071596	LS on CELL_PCH/URA_PCH operation in Enhanced CELL_FACH		to																
R2-071605	LS on MBSFN cluster selection and reselection, and suitability criteria	сс	to		to														
R2-071593 R2-071606	LS on Uplink VoIP Scheduling { Email agreement]		to																

The outgoing Liaison Statements are also available at:

 $tsg_ran/WG2_RL2/Outgoing_Liaisons/TSGR2_57 bis$

Annex D: Meeting schedule

Future WG2 and RAN plenary meetings:

Year	Meeting	Dates	Location	Country	Host
2004	RAN#24	02-04 June	Seoul	Korea	TTA
	WG2#43	16-20 Aug	Prague	Czech Republic	European Friends of 3GPP
	RAN#25	08-10 Sep	Palm Springs	USA	NA Friends of 3GPP
	WG2#44	04-08 Oct	Sophia-Antipolis	France	ETSI
	WG2#45	15-19 Nov		Japan	Japanese Friends of 3GPP
			Shin-Yokohama		
	RAN#26	07-10 Dec	Athens	Greece	European Friends of 3GPP
2005	WG2#45bis	10-14 Jan	Sophia-Antipolis	France	ETSI
	WG2#46	14-18 Feb	Scottsdale	USA	
	RAN#27	09-11 Mar	Tokyo	Japan	
	WG2#46bis	04-08 April	Beijing	China	Huawei
	WG2#47	09-13 May	Athens	Greece	EF3
	RAN#28	01-03 June	Quebec	Canada	
	WG2#48	29 Aug – 02 Sep	London	UK	EF3
	RAN#29	21-23 Sep	Tallin	Estonia	EF3
	WG2#48bis	10-14 Oct	Cannes	France	EF3
	WG2#49	07-11 Nov	Seoul	Korea	Samsung
	RAN#30	30 Nov – 02 Dec	St Julian	Malta	EF3
2006	WG2#50	09-13 Jan	Sophia-Antipolis	France	ETSI
	WG2#51	13 - 17 Feb	Denver, Colorado	US	NA Friends of 3GPP
	(Joint session	20 - 21 Feb	Denver, Colorado	US	NA Friends of 3GPP
	RAN2-RAN3-SA2)				
	RAN#31	08 – 10 March		China	
	WG2#52	27 - 31 March	Athens	Greece	EF3
	WG2 Ad-hoc	01-02 May	Espoo	Finland	Nokia
	WG2#53	08 - 12 May	Shanghai	China	Datang
	RAN#32	31 May - 02 June	Warsaw	Poland	EF3
	WG2 LTE Ad-hoc	27 - 30 June	Cannes	France	EF3
	WG2#54	28 Aug - 01 Sept	Estonia	Tallin	EF3
	RAN#33	19 - 22 Sep	US	Palm Springs	NA Friends of 3GPP
	WG2#55	09-13 October 2006	Seoul	Korea	Samsung
	WG2#56	06 - 10 Nov	Riga	Latvia	EF3
	RAN#34	29 Nov - 01 Dec	Budapest		EF3
2007	Workshop with GERAN, SA and SA1 on GSM LTE handovers	10-11 Jan	Sophia-Antipolis	France	ETSI

WG2#56bis	15-19 Jan	Sorrento	Italy	EF3
WG2#57	12-16 Feb	Saint Louis, Missouri	US	NA Friends of 3GPP
RAN#35	06-09 March	Lemesos	Chypre	EF3
WG2#57bis	27-30 March	St Julians	Malta	EF3
WG2#58	07-11 May 2006	Kobe	Japan	Japanese friends of 3GPP
RAN#36	29 May - 01 June	Busan	Korea	
WG2#58bis	25-29 June	<u>Orlando</u>	US	NA Friends of 3GPP
WG2#59	20-24 August 2006	Athens	Greece, Europe	
RAN#37	11-14 September	Riga	Latvia	
WG2#59bis	08-12 October		China	Huawei
WG2#60	05-09 November		Korea	
RAN#38	28-30 November	US		NA Friends of 3GPP

Appendix I

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